

# THE CONNECTICUT School Journal,

PUBLISHED UNDER THE DIRECTION OF

State Teachers' Association.

Resident Editor: H. C. DAVIS, New Haven.

BOARD OF EDITORS:

D. N. CAMP, New Britain.	A. MORSE, Hartford.
S. M. CAPRON, Hartford.	B. G. NORTHROP, New Haven.
I. N. CARLETON, New Britain.	A. PARISH, New Haven.
E. H. COOK, Woodstock.	N. C. POND, Danbury.
J. D. FERGUSON, Stamford.	H. E. SAWYER, Middletown.
N. H. WHITEMORE, Norwich.	



VOL. XXII.      FEBRUARY.      1871.

THIRD SERIES.      VOL I., No. 2.

TERMS: \$1.50 A YEAR.

PAYABLE IN ADVANCE.

All Communications and Remittances should be sent to H. C. DAVIS, Resident Editor, New Haven.

PUNDERSON, CRISAND & CO.,  
Printers and Lithographers,  
NEW HAVEN.

## APPROVED SCHOOL

PUBLISHED BY

IVISON, BLAKEMAN, TAYLOR & CO.

\*\*\* We shall be pleased to have the following new books extensively examined with a view to introduction, and copies for this purpose will be sent by mail on receipt of HALF the appended price.

**Now Ready:**

### A Shorter Course IN ENGLISH GRAMMAR,

By **SIMON KERL, A. M.**

Author of "First Lessons in English Grammar," "Common School School Grammar," "Composition and Rhetoric," &c.

ONE VOLUME. 340 PAGES. PRICE.....SEVENTY-FIVE CENTS.

This book is the result of much study, experience and reflection; and no pains have been spared to set it beyond all just grounds of critical censure. The condition and wants of schools in this country and in Europe have been carefully considered as well as the advanced state of philological science, and the work has been modified accordingly, so as to place it in the front rank of new and improved productions. The following are some of the points to which special attention is invited: 1st. The book is small, yet it is sufficiently comprehensive in outline, and not deficient in necessary detail. 2d. It consists of an oral course followed by a course of Text, in accordance with that method of teaching into which the best schools have gradually fallen by experience. 3d. The classification throughout is new, original, and and probably the most simple and natural ever given in a grammar. 4th. All things relating to the same subject have been brought together; while all trashy incumbrances, all useless generalities, and all quackery of expedients have been carefully excluded. 5th. The book excels in method, clearness, pithiness, brevity and completeness; in its definitions, illustrations and exercises; in practical utility and adaptation to the school room; and it is strictly native,—not an imitation of Latin or Greek Grammars.

### A Short Course in Astronomy

By **HENRY KIDDLE, A. M.**

Supt. of Schools, New York City Author of "New Elementary Astronomy."

ONE VOLUME, FULLY ILLUSTRATED. 180 PAGES. PRICE.....EIGHTY CENTS.

The design of this work is to supply a brief course of lessons in Astronomy for the use of young people, or of those whose time and opportunities do not permit a more exhaustive study of the subject. The objective plan has been followed as far as it is applicable to the subject, and the arrangement throughout the work, has been adapted to the topical method of recitation. An **ASTRONOMICAL INDEX** has been appended, which will be found very useful and convenient in affording a brief summary of definitions for final review. Problems of the Globes have been inserted in connection with those parts of the book to which they refer, so as to impress more clearly upon the pupil's mind the principles involved in their operation.

### RECENTLY ISSUED:

**ROBINSON'S FIRST LESSONS** in Mental and Written Arithmetic. Fully Illustrated. 180 pages. Price 40 cts.

**LITERATURE OF THE ENGLISH LANGUAGE**, comprising Representative Selections from the best authors. By E. HUNT, A. M., Principal of the High and Normal School, Boston. 1 volume, large 12 mo. 648 pages. \$3.50.

**GREEK PRAXIS; or, GREEK FOR BEGINNERS.** By J. A. SPENCER, S. T. D., Professor of the Greek Language and Literature in the College of the City of New York. One vol. 12 mo, Cloth. Price, \$1.00.

**FIRST STEPS IN MUSIC.** A course of Instruction in Music for common Schools. By Geo. B. LOOMIS. In 4 books. Nos. 1 and 2 now ready. Price, 15 cents each.

**CALISTHENIC SONGS.** A new and attractive collection of Calisthenic Songs, beautifully illustrated. By FLORA T. PARSONS. One handsome oblong volume Price 40 cents.

**READING AND ELOCUTION; THEORETICAL AND PRACTICAL.** By ANNA S. RANDALL. This is a very complete and thorough work, and can be used independently or in connection with any series of Readers. One volume. 12mo. Cloth, Price, \$1.40.

**The Illustrated Catalogue**, descriptive of the American Educational Series of School and College Text-Books, and **THE EDUCATIONAL REPORTER**, a handsome publication full of useful information, mailed free to any Teacher or School Officer.

Address, **W. A. WILDE & CO., Publishers, Booksellers and Stationers,**  
**No. 1 CORNHILL, BOSTON.**







# Valuable Educational Works For Common Schools,

PUBLISHED BY  
**HARPER & BROTHERS, NEW YORK.**

## WILLSON'S READERS AND SPELLERS.

Primary Speller, . . . . .	\$0.10	Third Reader, . . . . .	\$0.90
Larger Speller, . . . . .	.40	Fourth Reader, . . . . .	1.35
Primer, . . . . .	.25	Fifth Reader, . . . . .	1.80
First Reader, . . . . .	.40	Intermediate Third Reader, . . . . .	.90
Second Reader, . . . . .	.60	Fourth Reader, . . . . .	1.10

(SEE LIST OF NEW BOOKS.)

These Readers have now been before the public for about ten years, during which time they have proved satisfactorily that skill in reading and an elementary knowledge of the Natural Sciences may be acquired at one and the same time, and that, therefore, school time may be greatly economized.

## FRENCH'S ARITHMETICS.

First Lessons in Numbers, 40 cents.

Elementary Arithmetic, 50 cents.

Common School Arithmetic, \$1.00.

(SEE LIST OF NEW SCHOOL BOOKS.)

The plan for this Series, and for each book embraced in it, was fully matured before any one of the books was completed. As the rules are based upon true philosophical principles, there is a harmony, a fitness, and a real progressiveness in the books that are not found in any other series of Arithmetics published.

## FRENCH'S PARSER AND ANALYZER: *An elementary work on Grammar.* 40 cents.

This book is so made as to train the pupil to see, hear and think, as well as to remember. The briefest accurate definitions are given, followed by problems which the pupil is to study, and so work out the meaning and application of the principles and rules. The diagram for analysis will be found easy, stimulating, and helpful.

## DALTON'S PHYSIOLOGY. \$1 50.

This book, while containing a sufficiency of matter to satisfy the requirements of the College course, is written in language within the comprehension of the children who compose the higher classes of our Common Schools.

## HARPER'S WRITING BOOKS, with Marginal Drawing Lessons.

\$2 00 Per Dozen.

Six numbers, comprising the full Common-School Course, now ready.

These books supply a want which has long been seriously felt—the need of some method of teaching Drawing in Common Schools, at a low cost, and without the need of a special teacher.

## HARPER'S SCHOOL AND FAMILY SLATE, with accompanying cards, containing over Two Hundred Lessons in Writing, Printing, Drawing and Arithmetic. \$9 00 Per Dozen.

This is not a mere toy, but is carefully arranged for use in Primary Schools, and forms an excellent and practical introduction to any series of Writing and Drawing Books.

## WILLSON AND CALKIN'S CHARTS. Colored. Sheets, \$11 70; Mounted, 18 00; Atlas Form, \$20 00; Manual, \$1 50.

These Charts are designed, in connection with the accompanying **MANUAL OF INSTRUCTION** by Marcias Willson, and the "Primary Object Lessons" by N. A. Calkins, to furnish the teacher with the requisite aids for the practical application of a true system of Elementary Instruction. In the six Reading Charts the type is sufficiently large to be easily read at a distance of twenty feet. These charts will be furnished either separately or in full sets, either mounted or in sheets. When mounted, two are on a card of the size of each chart, about 22 by 30 inches. The sheets are mailable; the mounted charts can be sent only by express or as freight.

## HOOKE'S CHILD'S BOOK OF NATURE, in Three Parts: Part I, Plants Part II, Animals; Part III. Air, Water, Light, Heat, etc. Per Part, 90 cents. The Three Parts bound in one volume, \$2 00.

In this little book the author's object is to supply the parent and teacher with the means of introducing the child into three departments of Natural Science, viz., Botany, Natural History and Natural Philosophy. The lessons are simple, correctly and entertainingly written, within the comprehension of ordinary children, and are intended to prepare the pupil to take up the author's higher books.

**HARPER & BROTHERS, PUBLISHERS, NEW YORK.**

## CONTENTS.

Drawing in Public Schools.....	DELIA A. LATHROP. <i>Page</i> 47
Twelve Methods of Teaching Spelling.....	ELLA S. SMITH. 52
Instruction in Geography.....	H. C. DAVIS. 54
Science for Children.....	<i>Nature.</i> 61
Ventilation and Warmth.....	RALPH H. PARK. 64
Education and Reconstruction.....	ELIHU BURRITT. 67
Alphabet Studies.....	ELIHU BURRITT. 68
Truancy and Vagrancy in New Haven.....	<i>Committee.</i> 69
EDITORIAL.....	RESIDENT EDITOR. 75
<p style="margin-left: 40px;">London School Board Elections, 75; Yale College, 76; Good for Both Parties, 78; Connecticut, 78.</p>	
<p>SCHOOL NEWS AND PERSONALS.—Hartford, 78; Meriden, 78; State Reform School, 79; Willimantic, 79; Middletown, 79; Putnam, 80; New Hartford, 80; Wallingford, 80; New Britain, 80; Danbury Public Library, 81; Notes on New Haven Schools, 81.</p>	
MISCELLANY.....	82
BOOK NOTICES.....	84
PERIODICALS.....	85
TEACHERS WANTING PLACES.....	86

---

## NEW AND VALUABLE TEXT BOOKS.

**HARPER'S SCHOOL HISTORY OF THE UNITED STATES.** By D. B. Scott, A. M. \$1.50.

Teachers who have been unable to find, among the many imperfect works offered them, a School History containing the elements which should rightly compose such a work, will find in this work that accuracy, sense of proportion, and careful generalization which are necessary to a successful text-book on the History of the United States. It contains an unusual number of valuable maps.

**WILLSON'S INTERMEDIATE FIFTH READER.** \$1.40.

This book is arranged on the plan of the author's other Reading-Books, and embraces, in brief, the principles of Rhetoric, Criticism, Eloquence and Oratory, as applied to both prose and poetry. The whole adapted to Elocutionary Instruction.

**WILLSON'S SPELLER AND ANALYZER.** 45 cents.

In addition to containing several times as much matter for Spelling-Lessons as any other book of its size, it imparts thorough elementary instruction in the formation, derivation, and uses of words.

**FRENCH'S MENTAL ARITHMETIC.** 50 cents.

A practical work, rather than a book of arithmetical puzzles. This book completes the author's Common School Course.

**CALKINS'S OBJECT LESSONS.** \$1.50.

To parents and teachers who are endeavoring to train the perceptive faculties of children this book is of great assistance and value.

*In addition to the foregoing, we publish about 200 valuable text-books for school and college use. Among these are Loomis's Mathematical Text-Books, Smith's Principia, Latina, Comford's German Course, Dochartys Mathematics, Anthon's Classical Series, Harper's Greek and Latin Texts, Translations, Hazen's Rhetoric, Dalton's Physiology, the Student's Histories, Smith's Smaller Histories, Fowler's Grammars, Hooker's Natural Sciences, Etc., Etc.*

**HARPER & BROTHERS,**  
New York.

# THE CONNECTICUT SCHOOL JOURNAL.

---

Vol. I.

FEBRUARY, 1871.

No. 2.

---

## DRAWING IN PUBLIC SCHOOLS.

[Miss DELIA A. LATHROP, Principal of the Cincinnati Training School, is publishing a series of articles on Drawing in the *Illinois Teacher*. As Drawing is one of the subjects of present interest in this State, we publish her first article, taking it from that very excellent Journal.]

Drawing has recently been added to the 'Course of Study' for the public schools of the State of Massachusetts, thus ranking it, in importance, with Reading, Arithmetic, Geography, and Penmanship. This, that Massachusetts has done, we are not to suppose she has done without consideration. Drawing has been regarded as an accomplishment, and as such has been everywhere taught in select and high schools, the pupils of which are supposed to have time and means at their command. But what reasons can be adduced for requiring a part of the few months of the, at most, few years of the apprentice-boy's or factory-girl's school life to be devoted to this mere accomplishment, at the expense of the unquestionably necessary and fundamental subjects before named?

We have in the statement of the above question assumed two things, viz., first, that drawing is only an accomplishment; and, second, that it must be studied at the expense of other and more necessary subjects. Let us examine

these two assumptions in answering the following questions.

I. *Is a knowledge of drawing by the pupils of the common schools desirable?* The prime business of the teacher of every school is to stimulate, by properly-assigned school-work, and proper tests as to its accomplishment, to a healthy and vigorous action the intellectual faculties, and at the same time to give such discipline to the body—the organism which all thought must use for its expression—as shall render it most efficient in the service of the intellect. This granted, how is drawing adapted to the teacher's purpose?

*It cultivates the observation.* All teachers will agree, I think, that children do not, unless compelled to do so, observe closely. In this work they must study their models carefully, and any failure to do so is at once apparent. This careful looking is so fundamental to success that there can be nothing commendable done without it. In other things there may be a blind leaping at conclusions, undetected by the teacher; in this the issue most certainly indicates the course pursued. And it leads the child to observe in just the direction which will be, in the future, of greatest practical use to him. He is constantly obliged to compare, to judge, to remember, which certainly covers a large part of the field of mental activity. And drawing, like all other work in which the eye must be tutor to the hand, tends to concentration of thought, than which our pupils need nothing more.

*Again, success in drawing depends upon exactness.* It is a difficult matter to lead children to see the necessity of being exact in their work. In the drawing-lesson, children can be made to see this, and so be forced to condemn their own carelessness, and acknowledge their failures for lack of it. When a boy can be made to feel and admit his defeat to be the result of his own lack of precision, the teacher has a lever under him, by which he may certainly be lifted, not only to a higher plane of scholarship, but, in his future life, to a higher class of industries.

*Neatness of execution is absolutely essential to any praiseworthy results.* Correctness of method and conclu-

sion in the working of a problem may, to a child, atone for careless and untasteful execution; legibility may be all he considers it worth while to aim at in his penmanship; but drawing appeals so largely to the æsthetic faculty that his sense of the fitness of things is shocked to see it done slovenly, and his intuitions at once pronounce such an exercise a failure.

*Drawing, properly taught, stimulates the inventive faculty.* It is but trite to say that we are largely indebted to Europe for tasteful inventions, even as applied to our productive industries. This is easily accounted for: indeed, we could not expect it otherwise. The hard necessities of the past have compelled us to the service of the inflexible, ungarnished taskmaster Use; but now that we have the means and leisure to develop our latent national talent, there is no reason why his authority should not be tempered by the gentler and sweeter influence of Taste. To the development of tasteful invention, drawing, skillfully taught, directly and necessarily leads. How this inventive taste and skill may be applied in the development of our national resources; how it may be made to contribute directly to the brightness of the poor man's home, and indirectly to the increase of his wealth; how its fairy wand can change the 'pitiful hovel' to the 'vine-clad cottage' of the poets, we all clearly understand. The necessity for being less prodigal of our 'raw material' and increasing the market value of our products by skilled labor will become more and more apparent as our population increases and our resources, hitherto practically infinite, are found to have limits. It will then appear as it does not now, that drawing and allied studies are not accomplishments merely.

Madame Cavé, upon this point, well says, "We may safely assert there is no man of leisure who has not a thousand times regretted his ignorance of drawing, either when he has wished a house built, an article of furniture made, a garden laid out, or to preserve the remembrance of some locality, some noted edifice or work of art. And where is the industrial profession which has no need of

drawing? The joiner, the cabinet-maker, the carpenter and the builder, the florist, the embroiderer, the milliner, the mantua-maker, the manufacturer of shawls and cloths, the crockery-maker, and a thousand others, are only imperfectly acquainted with their occupations if they are strangers to this art. It imparts taste, and enables them to select beautiful designs, impressing their work with that seal of elegance which renders them sought after.

“If we revert to ancient times, not only do we find monuments and works of art which strike us with admiration, but the vessels and commonest utensils are in the most exquisite style. Why are the artists and even the workmen of antiquity so superior to our own? Why do we at the present day so servilely copy the ancients, distorting their works in vain our attempts to equal them? As to the artisans whose works have emerged, to our great astonishment, from the soil of Pompeii, we do not know that they could read or write, but they certainly knew how to draw, and much better than the majority of our artists. Evidently, the art of drawing was not in Rome, as with us, an accomplishment. An accomplishment, a superfluous something, superficially acquired and quickly forgotten, is the name now bestowed upon the art, which, to the artisan, is at least as useful, as necessary, as the art of writing.

“We say, then, to artists, in order that they may instruct the people—to the people that they may listen to the teaching of the artists, ‘Whoever would wield to advantage any industrial profession should learn to draw.’ We say to the rich ‘Your children may be deprived of the wealth you now enjoy: let them learn to draw, and in misfortune they will bless you for having given them a talent, an invaluable resource, which no one can take from them.’”

II. *If drawing is studied, must it be at the expense of reading, arithmetic, geography, and penmanship?* Decidedly, No. As much of these may be learned with drawing as without it. Truth, like a circle, has no extremes. Every link of the unending chain is a guide to every other link, begin where you will. A fact learned in drawing is true for penmanship, for mathematics, in its proper appli-



education is true everywhere. The fault is with the teacher if the facts learned in each subject are not made to serve a purpose in all the other lessons of the day. It certainly should be so, so that children may get some idea of the relations and application of the knowledge they obtain, or, rather, that the isolated facts may be wrought into knowledge.

Then, in order to the best and most rapid development, there must be a *variety* of school work. The terror of prison life is largely owing to its monotony. There is monotony of movement; monotony of diet; monotony of surroundings; monotony of occupation; monotony right, left, above, below; until soul and body lose all glow and elasticity, and gloom, like an immense bird of prey, settles upon its unresisting victims.

At the National Prison-Reform Congress, held in Cincinnati in October last, Sir Walter Crofton, the projector of a system of prison reform in England, stated his plan for subduing refractory prisoners. It is not, as one might suppose, privation of food, severe labor, or excruciating physical pain; but simply putting the culprit in a bare room, alone, to turn the crank of a hand-mill for breaking stones, which, he understands, when broken, *are used for no purpose whatever*, simply wheeled out of the way. No prisoner can endure, unbroken, such discipline. A day of this employment is tedious; a week, distressing; a month, insupportable. Solitude, monotony; mere mechanical employment, and that *worse than utterly unproductive!* Certainly 'Labor (to an end) is rest, and pain is sweet,' compared to life under such conditions. And yet (I shudder to ask the question,) do not the elements of this prison discipline enter too largely into the constant life of our schools? How much of monotony; how much of mere mechanical drudgery and no thought; how much of, to the child, useless labor is the work of every day? Who wonders that studious children tire of it; that dull children who apprehend least of the meaning of school life even hate it? Let us have more variety, more play for inventive genius, more school work of which the child sees the practical value, and school will be a brighter, holier place.

## TWELVE METHODS OF TEACHING SPELLING.

By ELLA S SMITH.

Spelling is usually considered a dry and uninteresting study, and many a teacher gives a sigh of relief as he dismisses his last spelling class for the day. But this exercise is not necessarily stupid; it requires, like everything else in life, variety to give it spiciness, and this may easily be secured.

1st. One of the best methods of teaching spelling is to have each pupil write the words of the lesson, in a book designed for the purpose, or upon his slate. The advantages of this method are obvious. Each pupil spells every word in the lesson. Many persons in spelling a word orally, will give it correctly, but when writing the same word, will spell it incorrectly. I have found in my own experience, that many pupils whose books denoted incorrect spelling, would make no mistakes when called upon to give the words orally. As, during our whole lives, we spell words more by writing than in any other way, the desirableness of learning to write words correctly is readily seen. This method may be used in all schools and in all grades of schools.

In the primary department, the little ones can print the words if they do not know how to write.

But perhaps some teacher will say "I have no time to correct these lists of words, for every hour is too full, already." This need not necessarily devolve upon the teacher. Each school may be divided into divisions, and the leaders of these divisions may be collectors and correctors. In the primary classes, the slates can be corrected during the exercises, either by a pupil or by the teacher.

2d. Another excellent way is to have the words of the lesson placed in sentences or phrases. In this method, the meaning and the right use of the words are brought out. Care should be taken that the sentences do explain the word to some extent. If the word *besieged* was in the

lesson, and the sentence written should be, "It is besieged," no advantage would be gained by the exercise; but the expression, "The besieged city was captured," gives some idea of the meaning of the word. The exercise should be conducted in writing.

3d. In connection with writing, it is well to have some portion of the school spell the words orally, giving definitions and derivations. Many times the definition of a word may be known from its derivation, and if the meaning of one word, formed from a certain root, is known, the meaning of all words formed from that root may be approximately inferred.

4th. Concert spelling has some advantages. Volume of tone is thus secured and confidence is gained. But mistakes are not readily detected in this method and it should not be used to the exclusion of other and better ones.

5th. One kind of concert spelling is to have each division of a school give one syllable, the whole school or class pronouncing the word. This secures attention and will do occasionally, for variety's sake.

6th. It is well, sometimes, to give a lesson upon synonyms. The synonymous words should be expressed in sentences, that the fine distinctions may be understood and appreciated.

7th. Phonetic spelling, or giving the sound of each letter, is a good exercise if the pupil is inclined to indistinct pronunciation. This method is sometimes employed successfully when the child is first learning to spell, but should be used with care.

8th. One of the best methods to secure attention is the following: Pronounce a word to a class and have each member, in turn, give one letter of the word. To do this well and as it would be given by one person alone, requires close attention.

9th. Another similar method is called "Matching Words." The teacher gives out a word to one member of the class, and he assigns to the next a word the first letter of which shall be the same as the last letter of the preceding word.

In order that this exercise may be successfully conducted, promptness and quick thinking are requisite.

10th. It is sometimes a good way for a teacher to assign as a spelling lesson, all of the words in a certain number of paragraphs in the reading book ; then, when the time for recitation comes, let the teacher read from the book, and pause at the words that he wishes the pupils to write.

11th. One of the most interesting methods is called "Illustrated Spelling." I will *illustrate* this method. Suppose the pupil has the word *icicle*. He would first present the object and then say "I have here a pendant mass of ice, formed by the freezing of water as it flows down an inclined plane or drops from anything. The name of this object is derived from two Danish words, one meaning ice and the other cone. The name is icicle. Spell and define." A great deal of useful information is given in this exercise and when the words are well selected it cannot be surpassed in interest.

12th. It will not do wholly to ignore the good, old fashioned way of "choosing sides." Many of us can remember earnest but pleasant contests for "our side" in the old red school houses, which, we are thankful to say, are institutions of the past. Let us allow our pupils, occasionally to "choose sides," if for no other reason, for the sake of "auld lang syne."

---

#### INSTRUCTION IN GEOGRAPHY.

By H. C. DAVIS.

There is a beautiful monument in the Grove Street Cemetery, in New Haven, erected to the memory of Jedidiah Morse, D. D., "THE FATHER OF AMERICAN GEOGRAPHY."

He prepared in 1784, at New Haven, for the use of a school of young ladies, a small 18 mo. geography, which was the first work of the kind published in America. This was followed by larger works in the forms of geographies

and gazeteers containing a full description of the country.

We are not informed as to when Geography was first introduced into the Common Schools of New England. That it should have been made one of the required branches to be taught in the schools of this Commonwealth, was the result no doubt of a conviction of its practical importance, for it certainly never would have been thrust into the "old red school-house" as a disciplinary force in the sense which the geographical magi of the present day consider it. However, its practical importance is now generally conceded, and the difference of opinion among school men is mainly in regard to the methods to be pursued in its study.

The first inquiry which our subject demands is: What are the objects to be attained in the study of geography?

If there were no modifying and local considerations, it would be easy to answer; but the quantity and quality of the text book, deficient means of illustration, and above all the thought constantly in the mind of the Grammar master that the study of geography is to prepare his class to attain a high per cent of right answers at the annual High School examination, modify his instruction.

The fact that in our Grammar Schools geography is studied to conform to the style of the annual test examination cannot be ignored in the consideration of this subject.

What is true of geography is also in a measure true of other branches. Says Mr. Harrington, who grapples with the fallacies of Grammar School education with a boldness which we admire, "That the present defects in the character of our Grammar School instruction in the higher classes are mainly attributable to the influence of the examination for admission to the High Schools no honest educator conversant with the working of the Grammar Schools will for a moment deny. Our grammar masters everywhere are accustomed to gather together the lists of questions that have been prepared at any time for admission to High Schools, and to exercise their first classes upon them, drilling and hammering away at them month after month, not to communicate the best knowledge in the best manner, but, to get the boys and girls at a high percentage into the High School."

But setting aside the further consideration of a matter which might properly be discussed under the head of Reform in Grammar Schools, it seems to me that the objects to be attained in the study of Geography are two-fold :

First. To give the child valuable information in regard to localities : namely, position of countries, cities, mountains, lakes, rivers, water indentations, land projections, plateaus, etc., information in regard to the inhabitants, the productions, both vegetable and mineral, the native animals, climate and the great routes of travel.

Second. As a mental discipline, resulting from the logical study of the subject.

To attain these objects there are two modes. One is to study mainly the physical features of a country, or, as some geographers would have it, the philosophic method ; the other, to study mainly the political characteristics, with such part of the physical as is adapted to the understanding of childhood.

The foremost advocate of the former method in this country thinks he has discovered "three normal grades" among children studying geography : namely, those in the *perceptive* stage ; second, those in the *analytic* ; third, those in the *synthetic* ; and hence "each requires a special treatment of the subject and a separate text book," and thus it has been discovered that not only are we by nature all sinners, but that we are fearfully adapted to a geographical series of three text books. Such an argument may subserve the interest of a bookseller, but it does not commend itself to the experienced and practical teacher.

One great fact must not be lost sight of in the consideration of this subject, and that is, that very few children of our schools go *through* a course of study, and any school arrangement is entirely in fault which does not recognize this. Almost every reader of this article has observed that very many drop out of school before they have finished the Third Reader, or have learned to make in script the capital letters, or are able "to do" long division.

Geography is not of such importance that it should be commenced as a *study* before the child has learned to read



fluently, to write intelligibly, and to add, subtract, multiply and divide accurately and rapidly. In fact some consider it of so little importance as a study in school that they would throw it out altogether. Mill says: "It has always seemed to me a great absurdity that history and geography should be taught in schools. Whoever really learned history and geography except by private reading?"

But since geography is one of the required branches, it is important that teachers inform themselves as to the best modes of securing results, economizing time and inciting interest.

All of us very likely are teaching from a *series*. Fortunately in most schools it has been reduced to two text books, Primary and Intermediate.

Taking these text books, and having in mind the twofold object of the study of geography as before mentioned, we will present a plan of work:

A skillful teacher wishing to give a child first ideas of arithmetic would not first teach it to count to one hundred and then put a book on elementary arithmetic into its hand and require a lesson to be learned, but she would first seek to develop with objects a clear perception of number, then simple combinations, and then lead the child on into fundamental principles. So in geography. How supremely foolish, and yet how general, is the plan to place a primary geography in the hands of a child who has not the first idea of location or geographical representation.

*There should be an introductory stage*, during which the child gets his first notions of geography from the teacher, is made familiar with the primary expression of terms, is taught the object of a map, how places are represented on it, and how direction is indicated.

Mr. Philbrick, who has some very clear and settled views on this subject, says: "The objects of this preliminary course would be to acquaint the pupils with the elements of geographical description, by directing their attention to the features of the landscape around them, and putting them in possession of the terms by which these are denoted; to fill the mind with lively pictures of what may be called

geographical types, such as mountain, hill, valley, gorge, plain, desert, table land, forest, undulating surface, mines, animals and plants, river, rapid, falls, bluff, creek, harbor, bay, beach, lake, pond, canal, railroad, marsh, bridge, vineyard, plantation, farm, glacier, volcano, dwellings, village, town, city, palace, manufactory, island, cape, promontory, isthmus, peninsula. *It is of little use to commit to memory definitions of these elements or types.* The thing is to give the pupil correct and vivid conception of the things themselves. In connection with this instruction, the pupils should be taught to understand how these geographical types are represented on the map by symbols, by reference to a plan of the school-house and yard, a map of the public squares, of the city, of the vicinity and of the State."

*The children should be made acquainted in oral lessons with the terms necessary to the subsequent study of the maps and book.* Let the teacher do this in the most familiar way. showing them pictures of mountains, volcanoes, plains, islands, etc., and by telling or reading stories of sailing on the ocean, of going round a cape, of being left on an island, of climbing a mountain, of life on a prairie and the like. Teach them the points of compass, and have the same marked on the floor. Show how direction is represented on paper or the board, the upper part being north and the lower part south. Have the children assist you in drawing a plan of the room on the board. You can locate the teacher's desk on the plan, and let them tell or point out where the chairs or settees should be represented. Let each one of the class point out on the plan his seat and tell the direction from some other seat. Let the roads or streets in the vicinity of the building be mapped and the children required to tell where certain houses on each side of them should be indicated. Allow the children to step to the board and draw the proper lines to represent them. Draw a rude outline map of the town and show them how hills and mountains are represented and how towns are bounded. The whole of this work can be accomplished in one term by daily lessons of fifteen minutes each. It would be better not to enter upon

such a course until the children have learned to read quite well, can write, and have learned addition, subtraction and the multiplication and division tables thoroughly.

The enthusiastic teacher who follows such a course will find that the children obtain a clear conception of the terms used in geography and understand the object of a map. They are then ready to study

PRIMARY GEOGRAPHY.

There is nothing in the nature of the science that makes it necessary to study first the hemispheres. After this oral course, the first lesson in the primary geography might be on the map of New England. Let this map, as an initiatory process, be *thoroughly* learned. Descriptive geography should be commenced at once, for map questions alone are but the "dry bones" of geography. It would be a waste of time to have the *whole* of the descriptive committed to memory. Not that there is too much descriptive in either of the excellent books of Mitchell, Warren or Von Steinhewer—rather, not enough. The teacher should supply much which she obtains from gazeteers and books of travel.

There should be a selection of the parts to be committed, and that the selection may be systematic, a set of topics adapted to primary geography should be given to the children, and the next step is to study the States by topic. These topics can be written on the board, but better printed on a card something in this form :

TOPICAL CARD FOR PRIMARY GEOGRAPHY.

1. Boundary.
2. How situated.
3. Compare size with some other state or country.
4. Locate the Mountains, and describe the elevation of the country.
5. Describe the Rivers, and tell which is the longest.
6. Locate the Capes.
7. Describe the Bays, Gulfs and Seas.
8. Locate the Lakes.
9. Productions and occupation of the people.
10. Capital and chief towns.

The pupils should use this in studying their lessons, and ask their own questions from it in recitation.

Map drawing can now be commenced. The object being to fix localities and impress outline. Better have them drawn rapidly and from memory than to have time lost on elaborate specimens of drawing, for map drawing should be considered as an auxiliary in the teaching of geography and not as one of the "fine arts."

Having gone over the States, the map question on the hemispheres might next be studied, and then the countries of each of the grand divisions taken up, using the topical card.

Having thus gone through the book, the children are better prepared to comprehend the explanations in mathematical geography which are to be *first* studied in

THE INTERMEDIATE.

Here the globe should be used freely in the explanation of the shape of the earth, the law of gravitation, the circles, the zones, climate, the revolutions of the earth, and the change of seasons. Definitions in Part First can now with profit be committed to memory. The states and countries can be studied, while using this book, in a similar way as in the primary, using a card, but the number of topics on it should be extended so as to require more research on the part of the pupil.

The excellent arrangement of topics in the descriptive part of Mitchell's Geography admits of a classification of topics like the following :

TOPICAL CARD FOR INTERMEDIATE GEOGRAPHY.

1. Boundary.
2. Position and extent.
3. Relative size.
4. In what Zone.
5. Climate ; compares with what country.
6. Natural features.
7. Locate the Mountains, and give the direction of the land slopes.
8. Describe the Rivers, and give the relative length of the longest.

9. Locate the land projections.
10. The water indentations.
11. Inland Seas and Lakes.
12. Products, and occupation of the inhabitants.
13. Native Animals.
14. Capital and Chief towns.
15. Population, and of what race.
16. Government and Religion.

This card, with slight changes, could be used with other geographies beside the one mentioned.

To study geography in this way requires some investigation on the part of the pupil, hence there should be as many books of reference placed within reach of the pupil as the teacher can obtain. Lippincott's *Gazeteer* is invaluable. Copies of other geographies than the prescribed text book might also be used as reference, and be placed where pupils can have access to them in preparing the lesson.

Thus taught, geography can be made an interesting and profitable study; something more than the dry detail of lists of names of places and definitions of races, governments and religions. A hunger and thirst for geographical information will thus be created, which will develop into habits of investigation and research, and although it may not secure the desired results at a High School examination it otherwise answers the objects to be attained in the study of geography.

---

#### SCIENCE FOR CHILDREN

The school-masters of the present day may be divided into two categories: those who teach, and those who hear lessons: the latter class, unfortunately for the next generation, being by far the most numerous. The mischief done to the community generally by the short-comings of inefficient teachers, is too well known to every one who has pierced below the surface of the great question of middle-

class education. The difficulties, however, that beset a science teacher in his endeavors to force scientific truths into the unwilling and unprepared minds of boys who have been subject to the sway of these same lesson-hearers, can only be realized by those who have gone through the task.

The case of a senior science class, which has been under my charge for some months past, will illustrate my meaning most fully. It consists of about a dozen boys, whose ages range between fourteen and seventeen years, and they receive twice a week an hour's instruction in chemistry and physics. The class may be divided into two distinct portions by a perfectly sharp line. Four of the boys have had the advantage of six or seven year's training under the principal of the school, who is not only a ripe scholar, but also an efficient teacher—a very rare collocation in these days. The rest have simply learned lessons all their lives. The four boys who have been taught, are as mentally distinct from the others as if they were different species of the same genus. The first four are bright, attentive, wide awake—I know of no other term to express exactly what I mean—logical and clear-headed; they can fairly follow a chain of scientific reasoning, and reproduce it afterwards link by link; they have a certain power of induction and deduction, although of course, being new to science, this power is necessarily only just awakened; they can connect and correlate facts and ideas; they can enumerate a series of phenomena in logical sequence; in a word, although their industry and application are far from colossal, the task of teaching them the truths of natural science is a comparatively easy one.

The other boys, as I have said before, almost form a distinct mental species. They cannot understand the possibility of learning anything without the aid of a book, and the idea of finding out anything for themselves has never entered their heads. Still they are far from stupid boys, being all possessed of good average brains; yet their faculties have not merely been allowed to remain undeveloped, but they have been utterly entangled, stunted and stultified by their "previous school contamination." These boys, it



must be understood, are the sons of parents belonging to the upper stratum of the middle class, and have mostly been to schools conducted by university men with honorable initials appended to their names—men, in fact, who are scholars but emphatically not teachers. Their great fault is a total want of mental method, without which the greatest brain is at naught. They are at home in Virgil and Horace, some of them are fair Greek scholars; they have been “through Euclid,” and can work moderately difficult algebraical problems in a certain mechanical fashion; they are well acquainted with the leading facts of English history, and know the exact position and population of Adrianople; but as far as real mental power goes, any poor boy, who has been in a national school for three years, would beat them hollow.

These facts surely point out the absolute necessity of beginning scientific training at a very early age; and I fancy this necessity has not been sufficiently dwelt upon in the numberless essays, letters, lectures and evidences on the subject of scientific education with which we have been deluged during the past decade. There seems to have been a notion abroad, that scientific teaching should not be begun before the age of twelve or fourteen; but why, I would ask, should boys' minds be allowed to remain fallow during all these years? The minds of boys of seven and eight should surely be as carefully developed as those of their seniors, and there is certainly no means of pure mental culture so successful as scientific teaching. *A boy of this age should not be taught science so much for the sake of acquiring a certain number of facts, as of developing his powers of observation and reasoning, and giving a proper tone to his mental faculties.* A boy of eight or nine takes a morning canter of three or four miles on his pony, not for the purpose of getting over some seven thousand yards of ground, but to strengthen his muscles and improve his carriage; his science lesson should be an intellectual canter, taken with the view to improve and strengthen his mental muscles and carriage.

\* \* \* \* It may be urged that children of eight or nine are too young for systematic science teaching, but facts prove the contrary. An ordinarily intelligent boy or girl of this age is perfectly capable of understanding the broad differences between the animal, vegetable and mineral kingdoms; that there are more gases than one in the world; that some of them are colorless, while others are brown or green; that some burn and others do not; that some plants grow from the inside, while others grow from the outside; that some animals have jointed backbones, that others have their bones outside their bodies, while others have none at all. Facts such as these are perfectly comprehensible to children even younger than those that I have named.—*Nature*.

---

#### VENTILATION AND WARMTH.

By RALPH H. PARK.

The writer of this article is a strong believer in the public school system, and in anything he may say, would not wish to be considered as a caviler at the excellent and systematic instruction given in the common schools of this State, but rather one who would expose to view some existing defects, and at the same time suggest a remedy.

The reader, if he is a teacher, will perceive at once that our subject is of such vast importance to him and the children under his charge, that it will be expected he will read and thoughtfully consider whether the few statements made in this article are true or false. If false, we shall hope to be "reviewed" in a future number of the *SCHOOL JOURNAL*.

Ventilation in its importance is a subject which, to the practical teacher, stands first and foremost. To one at all acquainted with hygiene, it will not be necessary to state that unless there is a constant and sufficient supply of fresh air in the school room, the children will soon show conduct

which, to the uninitiated, is inexplicable. The teacher finds himself irritable and unnatural ; and if he knows not the cause of the present trouble, will perhaps take steps in the discipline of his room which may cause many regrets.

The principal object of respiration in man is to oxygenize or purify the dark blood. Now as this is effected in the lungs by the action of the air, if it be pure, the blood, brain, and whole system (other conditions being right) would be in a healthy state. If we breathe impure air the blood soon becomes vitiated and mental, and physical suffering ensues. If to close a certain school room air tight, with the teacher and 60 pupils, more or less, confined in it for a certain time, would result in the death of most, if not all ; then we assert that to confine teacher and pupils in any school room where the air must necessarily become unfit for use, and for the greater portion of the session remain so, is to render all incapable of doing their duty and also sow the seeds of disease.

How many teachers and pupils suffer, when in the school room, from serious headaches, and yet are unable to see that the present pain is the penalty for violating physical law.

How many who believe in ventilation so manage the windows and other appliances as to expose no child to a current of air ! Dangers thick and threatening surround that child who is thus exposed. Such sudden changes of the temperature of the body not unfrequently cause sickness and death. Time is required (if the room is too warm) to reduce it to the proper temperature. Fellow teacher, your room was not suddenly heated and must not be suddenly cooled. All of nature's changes are gradual.

Even in our own New England, where the temperature is subject to great and trying transitions from heat to cold, in no instance do we experience a thermal change from 90 degrees to zero in a few minutes. You must not be impatient or thoughtless. You must not be governed by your feelings either ; for the writer has often been into school rooms where the heat was far below the proper temperature, and the teacher (who had but just arrived after a

brisk walk to school) was complaining of the warmth of the room, and had actually caused the windows to be thrown open, thus endangering her own and the children's lives. In every school room there should be a thermometer, and the atmosphere should be kept at an even and proper warmth. This only can be done by frequent consultation of the thermometer by the teacher. The *mercury* and *not her own feelings*, should govern her in all cases. For artificial heat by hot air, steam, or stove, 67 degrees. Farenheit is a healthy temperature. To repeat, ventilation and warmth are of paramount importance to any and to all teachers. We must not breathe, or permit our pupils to breathe, air which is foul with the odors of fifty kitchens, tobacco smoke, exhalations from fifty pairs of lungs, evaporations from fifty suits of clothing, some of which are clean and some unclean.

The ingenuity of the teacher must be exercised to its utmost capacity in devising ways and means for securing a constant supply of fresh air; and this must be done, even if contrary to the wishes or importunities of those who, not understanding hygienic law, are ever suffering and sorrowing for sins committed against its statutes. He must persistently follow the dictates of an enlightened judgment and conscientiously consider the whole subject, decide upon a safe and effective plan, and then courageously carry it out.

I cannot close this article without insisting that there should be a thermometer in every school room in Connecticut; and further, that no teacher should be allowed to have charge of any school in this Commonwealth who neglects to regulate the heat of her school room by the thermometer. "I speak that I do know to testify of what I have seen," when I say that where a thermometer hangs upon the wall of the school room it is not unfrequently the case that the teacher does not know where it is. Is this as it should be? Should the lives and health of the children be imperiled by the ignorance or neglect of those teachers to whose care they have been entrusted?

Fellow teacher, show yourself to be the professor and possessor of intelligence, virtue and character. Hope and strive for the highest success in your vocation, remembering that it can only be attained by hard work, and ever watchful care, wisely administered in the training of the mind and bodies of those children whom a confiding public commit to your care. So working, so watching the "little flock," if the meed of praise or pay be not accorded in this life, you can still look to the final reward, the heavenly benediction which awaits those who are faithful to the end.

---

## EDUCATION AND RECONSTRUCTION

By ELIHC BURRITT.

When this great continental Union was in deadly peril, every town and village in the free states sent a noble contingent of its sons to the rescue. While I was abroad for six years after the close of that conflict, I felt a deep concern lest a rebellion of ignorance, more lasting and perilous to the moral life of the nation than Southern secession, would ensue and wreck the great institutions which make the glory and strength of the Union, repurchased with so much precious blood. When I heard of the gulf streams of immigration pouring in upon the country from both sides of the Old World; when I heard how Europe and Asia were flooding this broad land with myriads of nearly all races, religions and languages, I asked myself these questions: Though we were able to overcome the great secession, have we moral power and patriotism enough to conquer this mighty accession that is invading and penetrating us from both sides of the American continent? Have we educational, assimilating vitality and force enough to *Americanize* these heterogeneous masses, and to blend them in with the native millions of our country, so as not to deteriorate the moral standard of our public life as a nation? Will the American people see their danger and duty in time.

and erect defences against a disaster more calamitous than any that could be sustained on all the fields of battle on which they have fought? These were questions which I regarded, perhaps, with more anxiety abroad than thousands did who considered them at home, because they knew better than I how they were being answered. On my return I was struck with happy surprise at the nations answer to these questions. I saw that the great civil war of accession had commenced in downright earnest; that every town through which I traveled had erected a new fortress against the invasion of ignorance and its train of vices and miseries. The great educational campaign is the one which the whole nation, in self-defence, must now organize and prosecute from sea to sea. An illustrious Roman mother, when asked to show her choicest treasures, pointed to her sons, and said, with a pride the world has shared: "These are my jewels." With loftier pride this America of our love and glory—this young mother of a hundred millions to be—when asked by the iron-clad nations of Europe to show her defences, should point to her free public schools, studding the continent like so many drinking fountains of knowledge, and say: "These are my castles and towers of strength and safety."

---

#### ALPHABET STUDIES.

By ELIHU BURRITT.

[Mr. Burritt has kindly furnished us these interesting extracts from his address at the recent dedication of the Burritt School in New Britain.]

I am in sympathy with the youngest pupils in our schools. If they find it hard to remember all the letters, let me tell them that I am a sixty-year old boy, puzzling over new and strange alphabets every day of my life, and find it harder than they do to remember all the letters. I am sitting too on the lowest bench, in the very infant school department of learning, trying to spell *bag* and *baker*, *cat* and



*dog* in several strange languages. If any of them get down-hearted over their first lessons, I should like to show them *my* primer, and the queer letters I have to put away in my memory. Not a child here will be expected to master more than twenty-six letters, while I have to remember more than a thousand, or letters in more than a thousand different shapes. As I traveled east and south, in the languages from Iceland to India, I found their letters growing more and more wild and strange in shape, size and number. When I reached Ethiopia, I found about one hundred and sixty to master. But every one of these stood out fair and square by itself, and I could take hold of it by the right end and put it away in my memory "right side up with care." But when I got as far as India, and grappled with that old mother of languages, the Sanskrit, I had to meet a whole regiment of letters, marching down upon me by platoons, or rather by squads of threes, fours and fives, all so locked or stuck together that each squad was like a walking bundle of heads, legs, arms and walking sticks; so that one could hardly tell which of them led the van of a word. Besides a large contingent of regular letters, more than two hundred and sixty of these bristling squads of consonants meet you at the very gate of the language, and you have to force your way through them before you can get into it. Now, every day I have to break through many bands of these gnarly and knotted consonants to make a single step in the language. So, perhaps, there is no man in the country of my age who has more of children's experience in learning and mastering alphabets than myself; and no one who enters the youngest school will be younger in primary learning than I am to-day.

---

TRUANCY AND VAGRANCY IN NEW HAVEN.

By HORACE DAY.

The Committee on Truancy and Vagrancy present the following statement and accompanying resolutions as embodying the result of their inquiries:

They find the chief obstacle to an efficient enforcement of the laws against school truancy and vagrancy to lie in the peculiar character of our school system. Connecticut is the only State in the Union in which the School District is a body corporate. In other states the management of the schools is regarded as one branch of the general municipal government of the town or city, where the same authority that builds the school houses and pays the teachers, also provides the House of Correction and directs the police. But in Connecticut the authority of the town, the city and the district, in respect to children, is a definite, limited authority given to each by law. Beyond this authority neither town, city nor district can go without going illegally. If the legislation of the State is defective or contradictory, or even implies a responsibility where no commensurate authority is given, the remedy lies in seeking a more harmonious legislation rather than in assuming powers, the exercise of which is manifestly illegal.

The uniform policy of the State, from its first foundation, has been to protect every child in his right to at least a decent education, and also to protect itself against the evils that would result to a people any considerable portion of whom were wholly uneducated. To secure these ends, different statute obligations have been imposed, 1st, upon parents and employers; 2d, upon Boards of Education; 3d, upon towns and town officers; and 4th, upon the officers of cities.

#### LEGAL DUTIES OF PARENTS AND EMPLOYERS.

The rights of children and of the State are alike protected:

1st. By a law which makes it the duty of parents and those who have the care of children to instruct them or cause them to be instructed in reading, writing, English grammar, geography and the elements of arithmetic.

2d. By a law which makes it the duty of all proprietors of manufacturing establishments to see that all persons in their employment, under 21 years of age, are instructed at least in reading, writing and the elements of arithmetic, and

3d. By a law which prohibits the employment of any child under fourteen years of age, in any kind of business

whatever, who has not attended, for at least three months in each year, some public or private day school in which instruction is given in reading, spelling, writing, English grammar, geography and arithmetic.

#### DUTIES OF BOARDS OF EDUCATION.

The legal duties of Boards of Education are :

1st. The exercise of general advisory powers as to the interests of public school education.

2d. The entire discipline and management of the public schools.

3d. Suspension during pleasure or expulsion from school during the current session, of children that are incorrigible.

4th. Personally, or by a committee, to examine annually or oftener, into the situation of children employed in manufacturing establishments, and report all violations of the law to some informing officer.

#### DUTIES OF TOWNS AND THEIR OFFICERS.

It is made by statute the duty of the town :

1st. To make provision concerning habitual truants and vagrants between the ages of 7 and 16.

2d. To make by-laws respecting such truants and vagrants, which by-laws must first be approved by the Superior Court. The penalty for breach of these by-laws being either a fine not exceeding twenty dollars or committal to a House of Reformation for a period not exceeding two years. The town or city at their annual meetings, or the mayor and aldermen are required by law to appoint three or more persons who are alone authorized to prosecute for violation of these by-laws.

3d. It is the duty of the selectmen if they find any who neglect the education of the children under their care to admonish them, and if they continue to be negligent, whereby the children grow rude, stubborn and unruly, then with the advice of a justice of the peace to take them from their parents and bind them out to some proper person, or to some charitable institution or society incorporated for this purpose in this State—boys till they are twenty-one and girls till they are eighteen.

4th. Children who resist the authority of their parents or guardians may be sent by any two justices, or by the police magistrate, to the house of correction or the county jail to be kept at hard work for a period not exceeding thirty days.

5th. The civil authority and selectmen, or a committee appointed by them, constitute a Board of Visitors, whose duty it is carefully to examine and report to the Superior Court any neglect of proprietors of manufacturing establishments to see that all minors in their employ know how to read and write and understand the elements of arithmetic: The penalty for such neglect being not to exceed the sum of \$100.

#### DUTY OF OFFICERS OF CITIES.

1st. The police are authorized to stop any boy under 17 years of age during school hours and ascertain if he is a truant or is engaged in any proper business, and if a truant, to return him to his school.

2d. The police are empowered to arrest any boy loitering about during school hours and beyond the proper control of parents or guardians.

3d. The police judge has authority to admonish the truant or vagrant for the first offence.

4th. He may for a repeated offence fine him not to exceed thirty dollars, to be worked out in all cases if not paid, or

5th He may send him, for having no lawful occupation, or for not going to school, or because he is growing up in idleness, vice or immorality, or because he is a truant, either to any institution of correction or House of Reformation in the town or to the State Reform school for a period not exceeding three years.

These provisions exhaust the entire legislation of the State on the subject under enquiry, and they are perfectly adequate to meet, so far as law can meet them, every difficulty with which we are called to contend. These evils in their full magnitude may be classified as follows:

1st. Irregular attendance arising either from necessity or carelessness.

2d. Truancy, whether proceeding from the negligence and indifference of parents or entirely the pupil's fault.

3d. Vagrancy, either with or without the connivance of the parent.

4th. The employment of children under 14 years of age who have not been at a regular day school for three months in each year.

5th. The neglect of proprietors of manufacturing establishments to see that all persons in their employment under 21 years of age have received at least an elementary education.

Mere irregularity of attendance can be provided for under the legal authority already possessed by the Board. They can, as they have done in past years, establish under special regulations ungraded schools to which pupils irregular in their attendance can be sent.

To meet the evils of truancy and vagrancy, the Board can also establish a truant school with such rules, dictated by a desire to reform the habits of truants, and administered with such practical good sense, that the Board, while avoiding the odium of usurping police authority, will be regarded by the community as doing all that they legally can do for the prevention of crime.

For offences that lie beyond the authority of the Board, the Police Commissioners may, as they have already indicated their willingness to do, appoint two judicious police officers whose duty it shall be to see that the law is enforced upon habitual and incorrigible vagrants, truants, and other offenders.

The committee believe that the town authorities are prepared to co-operate with the district and the city by making at once temporary provision for truants and vagrants until it is ascertained what and how extensive permanent provision is necessary to carry out the ancient and uniform policy of Connecticut, that no child within its jurisdiction shall be permitted to grow up in ignorance.

In accordance with these views the committee present the following resolutions for the consideration of the Board :

*Resolved*, That the committee appointed to confer with the town authorities be requested to call the attention of the Police Commissioners and the Police Magistrate to the necessity of an immediate enforcement of the truant laws.

*Resolved*, That the Committee on Schools be directed to establish one or more ungraded schools.

*Resolved*, That children who cannot be well instructed in the graded schools in consequence of irregular attendance, whether resulting from necessity or otherwise, may be sent to such ungraded school or schools.

*Resolved*, That children whose conduct is habitually subversive of good order, may, after proper admonition, be sent to such school.

*Resolved*, That in cases of truancy, vagrancy, and other offences, which by law are misdemeanors, the offender shall be placed on the following course of discipline, subject to such modifications as the committee on Schools may from time to time direct, viz: For the first offence, in addition to the ordinary school discipline, the name of the offender shall be given to such officer of the Board as may be appointed for the purpose, whose duty it shall be to see the parents or guardians of the offender, make himself acquainted with the circumstances of the case, and notify them of the consequence of such conduct if persisted in.

For a repeated offence the name of the truant shall be given to the police officers, who may be appointed by the Police Commissioners to enforce the law provided for such cases.

Whenever a pupil shall prove to be incorrigible under the ordinary discipline of the schools, the police magistrate shall be notified of the same.

JOHN E. EARLE,	} Committee.
L. W. SPERRY,	
S. E. MERWIN,	
HORACE DAY,	

## EDITORIAL.



We are not as well acquainted with the history of educational progress in this State as we hope to be, but enough to know that Connecticut is moving right on to a position where she will stand in line with the foremost States, in her system of common school, scientific and higher education.

Comparatively few realize what changes have been wrought within a few years, how distinctions have been broken down, how political parties and diverse interests have been united in the common cause of elevating the educational character of our State; how the industrial interests have recognized the importance of educated labor; how our public schools have been relieved of the odium of being pauper institutions, and have come to be considered the *best* schools for the wealthy and good enough for the poor. The prospects of her future are bright; but there is much to be done in educating public opinion and by legislation. What part can the thinking teachers take in advancing the cause? We answer, first: to work in the line of their profession. Improve your modes of thought, enlarge your views, acquaint yourselves with the opinions of the best educators, dignify your profession, improve your work, and thus show that your labor is worth more dollars. Do not be too conservative or sticklers for that which lies bedded in the past, but be willing to co-operate with those who, seeing errors, fundamental in principle, or that which is impracticable in mode, are striving to improve by the experience of the past. Abandon the idea that education is *absolute*. Morality is absolute. Its truths are eternal, its precepts unvarying. But not so with education. It is *relative* to the individual, to the community, and to the age to be educated. College corporations are recognizing this, and the same must be recognized in public school education and instruction.

Teachers can do much in the social circles in which they move, if well informed and settled in opinion in regard to the advantages or disadvantages of any proposed change. Not in an ostentatious way, but in presenting the subject and discussing it dispassionately and in a way to commend itself to those of good common sense.

Finally, read and circulate the SCHOOL JOURNAL, and if it is worth one dollar and fifty cents per annum, pay for it, and otherwise support it by your good cheer and an occasional article. Thus outside of any political ring, and in the line of your profession, you can do much for the educational interests of the State.

---

LONDON SCHOOL BOARD ELECTIONS.

The recent school elections in England were actually participated in by the women, several of whom were elected to office. Women as well as men could give their votes, if householders or ratepayers, or could be elected members of



the board; but they must, of course, be either *spinsters* or *widows*, not married women. The system used was known as cumulative voting, by which a minority can secure a representative. If there were three candidates to be chosen, an elector might "plump" or cast all his three votes for one of them, or divide them as he pleased, giving two votes to one and one to another, or one to each. We append some extracts from the *London Illustrated News* which a friend has furnished us:

"The elections in each of the ten divisions of the metropolitan district of a proportionate number of members of the London School Board, formed under an Elementary Education Act of last session, took place on Tuesday. The entire board consists of forty-nine members. \* \* \* \* It may well be supposed that much note was taken by the by-standers of the presence of female voters, who appeared pretty frequently at some of the voting places, and who experienced, we believe, not the slightest difficulty or annoyance in the exercise of their legal right. It will be observed that, in London, three ladies of distinction, who have been long known to the world for their efforts in literary, philanthropic, educational or medical undertakings—namely: Mrs. Grey, Miss Garrett and Miss Emily Davis—are elected members of the board by immense numbers of votes; while Manchester has only chosen one lady, Miss Becker, who was more specially identified with the questionable notion that her sex ought to be admitted to all professions and political powers equally with men. It is perfectly understood, however, among the supporters of the ladies elected in London, that the present example is not to be regarded as a precedent for the practical assertion of that strange doctrine. The School Board is not a local parliament, but a small select committee on business, whose deliberations may probably be conducted in privacy, and under whose charge will be the provision of teaching for girls as well as for boys, the appointment and superintendence of schoolmistresses and other details of management which experienced ladies can best understand. \* \* \* \* This board of forty-nine have at their disposal powers and resources such as no school association in England ever could boast of. They possess the means, and will be bound to use them, of ascertaining with accuracy the educational wants of a district comprising three millions of inhabitants. They can build, hire, or locate school houses very nearly at discretion. They can appoint managers, choose masters, frame regulations, direct studies, select books; in a word, do almost every thing which an intelligent supervision of elementary education takes it for granted should be done. And when they have provided school-houses and schoolmasters they can, if they will, forthwith proceed to fill them, by remitting fees to destitute parents, and by gently and indirectly, or roughly and directly, coercing negligent, depraved, or socially worthless parents.

---

#### YALE COLLEGE.

THE RESIGNATION OF PRESIDENT WOOLSEY—COURSE OF GOVERNMENT—WHO WILL SUCCEED HIM.

President Woolsey's proposed resignation and the comments it has called forth, in connection with Dr. Pickering's heated controversy with Young Yale, have imparted increased animation and interest to the discussions with refer-

ence to the past and future of the college. The reasons for this action of the President seems to be that he has filled the position for a quarter of a century, and feels entitled to a release from the onerous duties of his office, in order that he may devote himself more entirely to his favorite investigations in history and science; then, too, he has reached that age when men usually resign an active control of affairs, and possibly he shrinks from entering upon the solution of the difficulties which are now arising, and which must be solved by his successor, viz: of harmonizing the various departments, which have so grown and prospered under his administration into a University. The idea given out by certain journals that he has resigned under the pressure of friendly "advice" is entirely without a foundation. The step has long been thought of, and he announced to the graduating class of 1869, and again last summer, that when they returned on their triennial visit another than himself would be occupying his chair.

As an educator, President Woolsey has followed strenuously the views expressed in his inaugural. He has maintained constantly that the college is a place to form the mind rather than to store it, and has opposed anything which to him seemed one-sided in its tendencies. While he has the honor of being the first Professor to introduce the study of the Greek tragedies into American colleges, and has always been an able champion of the classics, he has spoken often in advocacy of a higher range of mathematical studies. He has never looked with a favorable eye upon what is known as the "literary man" in college, and has regarded the high estimate which, in this country, is placed upon fluent speaking and writing, as disastrous in its effects both on the mind and character of young men. Under him the Senior Year studies have been so systematized and increased as not to leave much time for literary studies. He is the founder of the most valuable and practicable scholarship in college. His decided views in favor of the academic training, as the true basis for culture, have led him to differ at times with the zealous advocates of the scientific school. The question of the successorship is one much more difficult to be solved now than it was when Dr. Woolsey was chosen. The papers have suggested various names, but have not thrown much light upon the question. Dr. Bacon and Prof. Gilman of the Scientific School are mentioned. Whoever is selected will find many perplexing questions to handle. He must manage both the Sheffield School and the Academic Department. The Scientific School now claim that their diplomas entitle them to as high a degree as the academical, which President Woolsey has denied. He must find a way into the affections and pockets of moneyed men, so that all departments can be efficiently and successfully administered. He must meet the Sunday question and decide whether one session of compulsory attendance at chapel is not as good as two. He must decide whether the present non-interference theory in the instruction, by which a professor never knows of the progress of classes under tutors in his department save through the reported marks, is better than the "interference theory," which would make it the duty of the superior to inspect occasionally the classes of his subordinates. And above all he must be able to decide the discussions between the two parties among the Alumni.—*N. Y. Tribune.*

## GOOD FOR BOTH PARTIES.

The legislation of the State of Connecticut, in regard to Education, is not likely to be far from right when both political parties stand committed to forward the interests of public instruction. The call of the Republican State Convention—soon to be held—mentions “the promotion of education” as one of the ends to be aimed at: and the Democratic State Convention, held in Hartford, January 17th, passed the following vote:

*Resolved*, That the source of power being in the people, free schools and general education are essential to good government and the perpetuation of free institutions.

## CONNECTICUT.

During the last decade, the relative increase of the population of Connecticut has been greater than that of any other New England State, the advance being 87,000, which is more than the aggregate gain of all the other New England States, except Massachusetts. There is little advance in our agricultural resources. Our poor soil and narrow territorial limits forbid much growth in that direction. The secret of our advance in population and prosperity, is the multiplication and success of our varied manufactories. Connecticut is a busy hive of manifold industries. In this respect she has “got the start” and means to keep it. Nothing will ensure this result so much as good schools. In the rivalries of the trades and useful arts skilled industry alone can win the prize.

## SCHOOL NEWS AND PERSONALS.

**HARTFORD.**—We have received advanced sheets of the forthcoming report of the Hartford High School, but too late for extended mention in this number. We hope in our next to give some account of the Hartford High School—its history, its present status, and a description of its domicile—a school edifice unsurpassed in architectural beauty and completeness.

**MERIDEN.**—Drawing has recently been introduced into the schools of this city. The energetic and progressive acting school visitor, W. C. Benham, writes thus: “We have better school-houses, improved methods of teaching, more and better text books and more competent teachers than formerly. New branches which are demanded by the age, are occasionally added. The most recent of these adopted in Meriden, is that of drawing. The acting school visitor in his rounds has always observed more or less of a taste for this art displayed in the children, by their quite life-like and correct sketches of flowers, fruits, animals, maps beautifully drawn on the black boards of their school room,—enough, certainly, to establish the fact that there is no small amount of

this natural talent in our scholars of both sexes that should be properly educated." Miss Lizzie Loring, of Boston, has been engaged to give instruction and supervise the introduction. She will give two practical lessons, of an hour each, in every school, besides special lessons to teachers, evenings.

*State Reform School.*—In 1839, on the representation of Dr. Hatch, that the school needed greater accommodations, the legislature voted an appropriation of \$50,000 to build a new wing, the superintendent assuring it that the sum would be sufficient. The addition is now finished, in good, substantial style, and there is money enough left to completely furnish and equip it. By this enlargement the institution can accommodate 350 boys. There are now in it 280, and there were fit accommodations for only 200; so that 80 must have been sent away but for this enlargement. This became evident when we inspected the sleeping rooms and the school rooms. Some 80 boys were crowded at night into bed with comrades, beds that were built for one person. And when the boys were all seated in the school rooms, the desks seemed to be pretty well filled. It is difficult to see how they all could have been packed into the old room. The total cost of the whole property, as it stands to-day, land and buildings, is only \$115,000. It is a miracle of cheapness for a State institution, and is a valuable property.

*WILLIMANTIC.*—Mr. T. H. Fuller, a graduate of Yale College, has charge of the school in the Second District. We are informed that he is succeeding finely, and as he becomes more wonted, will fill the large vacancy left by his predecessor. This is the school formerly taught by D. P. Corbin, now Principal of the Asylum Hill School, in Hartford. In the First District we suppose that our friend, J. D. Wheeler, is *filling*, as few are able to fill, the chair of Principal.

*MIDDLETOWN.*—Remarkable progress has recently been made in the schools of this city. A few years ago they were in a low condition. The school houses were poor, ill-ventilated and overcrowded. Private schools were patronized by all who could afford the means. The public schools were for the poor, not to say, poor schools. Now the aspect is generally changed. The new "Central building" is one of the best in the State. The interest of parents, pupils and the public at large has greatly deepened. The attendance is increased. The report of the State Board of Education shows an increase of 100 in winter and 146 in summer in the attendance. The wealthiest families of the city seem glad to place their children under the care of Mr. Sawyer, the Superintendent, because he has made the public schools so much better than any other. It is not strange that the City Board refused to yield to the wishes of the State Board of Education when they invited him to take charge of the Normal School nearly two years ago. The late anniversary of the High School attracted a very large audience, many being unable to gain admission to the commodious hall. The exercises were highly creditable to the instructors of the graduating class. The first report of the State Board of Education, printed in 1866, gives the total expenditures of this city, for schools, as \$7,103, while during the last school year the amount expended was \$58,000. The most gratifying fact is, the cheerfulness and unanimity of the people in assuming their heavier burdens. We are told there was far more complaint and difficulty in raising the \$7,000 for poor schools than now, when the amount is more than eightfold greater. The people

say: "Poor schools are dear at any figure; now we pay more and yet get our money's worth."

**PUTNAM.**—The last school report of this town, recently published, advocates the union of the village districts, the erection of a new central building for graded schools and the establishment of a High School. The report says: "The educational interests of this town are now of vast magnitude. Our enumeration shows about 1,100 school children. It is hoped that our citizens will not, in this regard, be blind to the prosperity, honor and best interests of the town."

**NEW HARTFORD.**—The following statistics illustrate the working of the law of 1869, in regard to the employment of children under 14, in manufacturing establishments. In the northeast district, 1869, enumerated, 274; registered, winter, 107; registered, summer, 99; 1870, enumerated, 230; registered, winter, 220; registered, summer, 157. Number of scholars registered during the year 1869, 119; in 1870, 250. The gains are apparent and suggestive.

**WALLINGFORD.**—The classes of Mr. Kellogg, Misses Ives and Atwater, of the Central district, numbering about two hundred pupils, assembled at the new school house on Main street, for the first time, on Monday, the 9th instant. It is intended that all in the district, excepting one or two primary schools will, ere long, be accommodated at the new building. The advantages of a graded school are appreciated by all who are interested in educational affairs. The need of such an institution, in this place, has long been felt, and now that we have one, our citizens cannot but rejoice. The building is a large and handsome structure, built of brick, and is admirably located on the corner of Main and Christian streets. It covers an area of 60x80 feet, is three stories high, and surmounted with a Mansard roof, near the front center of which rises an elegant tower, in which was recently placed a suitable bell. There are four rooms in each story, making twelve in all, each 27x30, and handsomely cased with chestnut and black walnut. Each apartment is supplied with about thirty desks, with seats to accommodate sixty scholars. The arrangements for warming the building are complete. Two furnaces, the "Webster" and "Boynton," the latter from Treadway & Warner's works at New Haven, will furnish ample heat to make it a comfortable place in the coldest weather. The building committee, consisting of Messrs. J. M. Leavenworth, Samuel Simpson, A. I. Hall, R. Bristol, J. R. Campbell and R. H. Cowles, have shown commendable enterprise and taste in getting up a public building of this kind, which is truly a credit and an ornament to the town.

**NEW BRITAIN.**—The Burritt School, at New Britain, was dedicated on Monday, January 2d. This is a fine brick structure, three stories high, with four school rooms on each floor, though the upper story is not yet finished. The rooms are supplied with the most approved furniture, are heated by steam, are well lighted and every way admirably adapted to their purpose. The total cost was \$30,000. This large expenditure has been made, not only without any opposition, but with the hearty approval of the largest tax-payers of New Britain. This fact is highly creditable to the far-sighted and public-spirited manufacturers of this thriving place. The school is appropriately named in honor of a very distinguished native, and now again a citizen of this town—"the Learned Black-

smith," Elihu Burritt. Addresses were given by Mr. Burritt, Secretary Northrop, members of the Board of Education and other citizens. The *New Britain Record* says: "The wonderful advance of public sentiment in Connecticut, on Education, was well illustrated on this occasion. In the construction of so fine a building, New Britain has shown herself a noble exponent of the advanced and advancing position the people are taking in educational matters."

**DANBURY PUBLIC LIBRARY.**—The late W. A. White, of Brooklyn, L. I., left ten thousand dollars, to be paid five years after his decease, for the establishment of a public library in Danbury. Within two years after his death, his brother and executor applied for and obtained a charter, authorizing such a library, upon which he, A. M. White, paid to the trustees, in the spring of 1870, the sum left by his brother, and also gave a lot and house thereon standing, worth ten thousand dollars, for the use of the library, and five hundred dollars cash for repairs of the house. The original grant of ten thousand is securely invested at ten per cent. To enable the trustees to open the library as soon as possible, and not encroach upon the original, Mr. A. M. White and Mr. Charles Merritt have each given five hundred dollars, which sum has been invested in books, now accessible to the public. In connection with the library, the trustees have opened a reading room, well supplied with periodicals and papers. Mr. A. M. White and his brother, G. G. White, have also proposed to give five thousand dollars each, for the erection of a new and suitable building for said library, whenever the town may see fit to give additional aid in the matter. We hope the time is not far distant when Danbury will enjoy the full benefit of a good public library in a suitable building.

The Catholics of Danbury have disbanded their sectarian school, and are now giving their hearty support and patronage to the public schools. Mr. John Flood, the late principal of the Catholic school, is employed as teacher in one of the intermediate departments of the public school. Mr. Flood was for several years a teacher under the government, in his native country, and only needs to become acquainted with our system of education to make an efficient teacher.

---

#### NOTES ON THE NEW HAVEN SCHOOLS.

**TRUANCY, VAGRANCY, ETC.**—The Board of Education, in concurrence with the action of the Selectmen and Board of Police Commissioners, has made encouraging progress in relation to truancy, vagrancy, etc., since the publication of their report in the January number of this journal. In the preceding pages we present the report from a special committee, which embraces a statement and accompanying resolutions, as embodying the results of their inquiries. Great care has been taken to determine what are the duties of the Board of Education, and what are the limits of their authority; also, where the obligations of municipal authority begin. After a free and cordial consultation by the parties named, conclusions have been reached, which warrant the commencement of a course of discipline with offenders, which can hardly fail to produce most desirable results. A more full account of proceedings will be given hereafter.

**RESIGNATION.**—Mrs. A. P. Burdett has resigned her position as teacher of Room No. 1, in the Skinner School, of which she has had charge since the

opening of the school in May, 1893. Few teachers have made a better record than she has done during the past two and a half years. Miss Nettie L. Leonard, formerly a pupil in the Fair street Training School, is appointed as her successor.

**HIGH SCHOOL.**—Miss Gibbs, a teacher of superior qualifications and large experience, has been added to the corps of teachers in the High School.

**PROF. BAIL** is rendering a valuable service to the New Haven evening school. He is gratuitously giving instructions to a large class in drawing, every Monday evening. His lessons are valuable and gratefully appreciated by the class. The public, including many school officers, need to be enlightened on the very great importance of teaching drawing in schools of every grade; while teachers need advice and counsel in respect to methods. No one in this State is better prepared to do this than Prof. Bail. He has signified his willingness to furnish us with a series of articles on this subject. The first will be published in the next number of the JOURNAL.

---

## MISCELLANY.

---

### SALARIES.

The following are the salaries paid to superintendents of schools in some of the states and cities:

*New York.*—Abram B. Weaver, State Superintendent, \$5,000; one deputy at \$3,000; four clerks, two at \$1,600, and two at \$2,200 each.

*Massachusetts.*—Joseph White, Secretary of Board of Education, \$3,000,

*Connecticut.*—Birdsey G. Northrop, Secretary State Board of Education,

*Pennsylvania.*—J. P. Wickersham, State Superintendent, \$2,500, and \$600 and \$400 traveling expenses; one deputy at \$3,200 and clerks, \$2,500.

\$3,000, and \$500 traveling expenses; one clerk at \$1,600.

traveling expenses; a deputy and clerks, whose salaries make an aggregate of \$6,900.

*Illinois.*—Albert G. Lane, County Superintendent, Cooke county, \$3,000.

*New York City.*—Henry Kiddle, Superintendent, \$4,750; four assistants, at \$4,200, \$3,500, \$4,200 and \$3,600.

*Brooklyn.*—J. W. Bulkley, \$3,000; one assistant at \$2,500; Secretary, \$2,500; two clerks each \$1,500, and one messenger \$500; aggregate \$11,500.

*Cleveland, O.*—Andrew J. Rickoff, \$4,000.

*Cincinnati.*—John Hancock, \$3,500.

*Boston.*—John D. Philbrick, \$4,500; horse and carriage furnished in addition.

In Boston, four Head Masters are employed at a salary of \$4,000 each; one Head Master, at \$3,500; forty-one Masters, at \$3,000; thirty-nine Sub-Masters, at \$2,400; nine Ushers, at \$1,700; one female Principal, at \$1,700; four High School Head Assistants, at \$1,500; nineteen High School Assistants, at \$1,000; thirty-three Master's Assistants, at \$900; sixty Head Assistants, at \$800; four hundred and twenty Grammar School Assistants, at \$700; and three hundred and twenty-five Primary Teachers, at \$700; also, special teachers in music,



modern languages, sewing, drawing, etc. The average yearly salary paid regular teachers is \$920.

**NEW YORK CITY.**—New York has long maintained evening schools, which have been highly useful. More recently an evening High School has been successfully organized. This winter the attendance in this High School is large—there being some nine hundred members. Great interest is manifested in all the departments. Besides the Principal, John Jasper, Jr., twenty-one assistants are employed in as many different rooms. Prominence is given to free hand, mechanical and architectural drawing. Book-keeping, algebra, geometry, French and German, history, political science, astronomy, philosophy and chemistry are among the prescribed studies. Great interest is manifested in all the departments.

**MR. HOAR'S NATIONAL EDUCATION BILL.**—As we go to press, (January 18th,) the House of Representatives is about to discuss Mr. Hoar's bill for the promotion of education in the United States, and especially for the establishment of school systems on a good plan in new or "reconstructed" states. We may print in our next the bill, and until then we will reserve our comments on it.

**NORMAL SCHOOL FOR FREEDMEN AT HAMPTON, VA.**—This institution, under the direction of Gen. Armstrong, late of the United States Volunteers, assisted by teachers of the highest qualifications, some of them from Connecticut, is designed to train up young men and women of African descent to be teachers of their own race at the South. Rev. T. K. Fessenden, of Farmington, who lately secured the establishment of the Industrial School at Middletown, is now the secretary of the Hampton School, and is trying to raise an endowment fund. He deserves the heartiest encouragement.

**AT A GREAT EDUCATIONAL CONGRESS**, recently held in Vienna, and attended by about five thousand educators from all parts of Germany, it was agreed that the principles of religion, but not the dogmas of any particular sect, should be taught in the national schools. They also agreed that the education of girls should be compulsory to the age of sixteen, and that they should be trained for various trades and professions.

**RICHMOND.**—In those chivalric days, before the war, there were no public schools in Richmond, Va.; now there are in this city, thirty white and thirty colored public schools. This looks like practical reconstruction.

**THE SCHOOL-BOOK AGENCY.**—The newspapers, a few days since, reported that the publishers of the Board of Trade had held a quarterly meeting, at which it was announced that the abolition of the agency system, in introduction and distribution of school books, had proved, after six months' trial, perfectly successful. We are sure that all good school teachers and school officers will rejoice that the change from agencies to advertisements works so well.

**BALTIMORE** rejoices in the promise of several millions from one of her citizens, John Hopkins, for the endowment of a University and a Hospital, free to all, without respect to race or color.

## BOOK NOTICES.

THE ECLECTIC SERIES OF GEOGRAPHIES. Published by WILSON, HINKLE & Co., Cincinnati.

These books, so long promised by the publishers, are now presented to the public. The series consists of three books. The Primary and Intermediate have been prepared by A. Von Steinwehr and D. S. Brinton, and the School Geography, the third of the series, by A. Von Steinwehr. Gen. Von Steinwehr is a resident of this state, and is well known as a geographer. His education and experience amply qualify him for a work in which it is well known that the Germans excel. The typographical appearance of the books is excellent, and the pictorial illustrations original. The maps, according to the "present fashion" in such matters, are colored to represent the elevation of the country. The few errors on the maps will no doubt be corrected in the second edition. In the Intermediate, each chapter contains a brief lesson in map-drawing. The advantages of constructive map-drawing are so apparent that we heartily commend this feature of the book.

BAIL'S DRAWING CHARTS. By Professor LOUIS BAIL, Sheffield Scientific School, Yale College. Published by J. W. SCHERMERHORN & Co., New York.

The series consists of twenty charts, each twenty-four by forty inches. The patterns are printed on manilla paper, in broad lines, large enough to be seen by an entire school. These charts furnish a simple, progressive and scientific system in drawing. We speak what we do know, when we say that with them any intelligent teacher can so train the eye and hand as to lay a sure foundation for excellence in art and design. One very important feature is, that by this method the eye and judgment are exercised in the proper proportion of the figures to be drawn. The drawing exercise with these charts cannot become simply a copying exercise. With these charts there is a Key with full directions, to enable any teacher to use the charts intelligently. The Key contains also a treatise on Perspective. The results in the New Haven schools, where Prof. Bail's charts are used, are considered very satisfactory. As drawing is doubtless to become one of the regular school exercises in our State, teachers and school committees would do well to inform themselves on this subject.

THE HISTORY OF PARAGUAY. By CHARLES A. WASHBURN, Commissioner and Minister, resident of the United States at Asuncion, from 1861 to 1868, in two volumes, 8 vo., illustrated. Published by Lee & Shepherd, Boston.

This is a work of unusual merit, and the only reliable history of that country which has been published. The publication of Mr. Washburn's great work on Paraguay has done much to enlighten the public on the subject of the Paraguayan question, now before Congress. Whether or not this discussion results in an authoritative condemnation of the miserable course of some of our naval officers in their treatment of Minister Washburn, it will doubtless lead them to be a little more cautious in future, a little more regardful of the honor of the American flag, and a little less sensitive of their own duties and privileges.

MITCHELL'S NEW SERIES OF GEOGRAPHIES. Published by E. H. BUTLER & Co., Philadelphia.

It is hardly necessary to pen a sentence in commendation of a series so well and favorably known in Connecticut as is this. There is a special edition of the NEW INTERMEDIATE prepared for Connecticut schools. It contains a new map of the State and four pages of descriptive to accompany it, in addition to the regular matter. The topical arrangement of the descriptive in the INTERMEDIATE can hardly be improved. The publishers announce the publication, in a few weeks, of an entirely new set of large wall maps to accompany this series; they will, however, be adapted to any other series of geographies. This is certainly a *desideratum*.

#### THE PENNSYLVANIA SCHOOL REPORT, 1870.

By the courtesy of J. P. Wickersham, State Superintendent, we have been favored with a copy of this report. It contains not only the report of the State Superintendent, but also the reports of County and Borough Superintendents. From the tabular statements we learn that the state, outside of Philadelphia, has 13,832 schools, 16,097 teachers, an attendance of 695,052 pupils. The average salaries of male teachers per month is \$39.63, and for female \$30.55. Philadelphia has 380 school houses, 1,515 teachers, 133,839 registered pupils. The average salaries of male teachers per month was \$135.98, and of female \$43.61. There are now five State Normal Schools in operation, located respectively at Millersville, Lancaster Co.; Edinboro', Erie Co.; Mansfield, Tiago Co.; Kutztown, Berks Co., and Bloomsburg, Columbia Co. These schools had, during the past year, 66 professors and teachers; 2,675 students, of whom 670 were in the model schools. Superintendent Wickersham presents strong reasons for competitive examinations for the national schools at West Point and Annapolis. In this matter his views are in perfect accord with our own Superintendent, B. G. Northrop, who has realized the idea in its workings. Connecticut was the first state to send forth cadets on competitive examination, and Governor English, then in Congress, was the first thus to appoint.

#### BOSTON SCHOOL REPORT, 1869.

Our thanks are due to Superintendent J. D. Philbrick for this report of the unrivalled schools of Boston.

#### THE REPORT OF THE UNITED STATES COMMISSIONER OF EDUCATION, 1870.

We received from Commissioner EATON this valuable document just as we were going to press. We hope to review it in our next number.

---

### PERIODICALS.

---

We shall be glad to make the acquaintance of the educational journals in other states. We hope to be at least on speaking terms with them all, and it will not be our fault if we are not "hale fellows well met."

**THE ILLINOIS TEACHER.**

We are pleased to place this excellent journal on our list of exchanges. We think that we shall do our readers a favor to reprint an occasional article from its pages, if each number is as valuable as the January number. It is published at Peoria. S. H. WHITE is editor. Subscription price, \$1.50

**THE RHODE ISLAND SCHOOLMASTER.**

This journal comes to us looking like an old friend rejuvenated. It is now in its seventeenth volume. May its readers ever derive benefit from the "Schoolmaster abroad." T. W. BICKNELL and T. B. STOCKWELL, Providence, are its editors.

**THE IOWA SCHOOL JOURNAL.**

We have received the January number of this educational journal. It contains thirty-six pages of excellent and instructive reading for the teacher. The *Journal* is now in its twelfth year, and is attempting to do for Iowa what we are for Connecticut. It is edited by JAMES ELLIS, Des Moines.

**THE INDIANA SCHOOL JOURNAL.**

We are pleased to enter this journal on our list of exchanges. The excellence and variety of contributed articles, in the first number for this year, is noticeable. It is edited by GEO. W. HOSS, Bloomington, Ind.

**THE CALIFORNIA TEACHER.** Edited by HON. O. P. FITZGERALD, State Superintendent.

This is not the least of the many treasures from beyond the Sierra Nevadas. We hope to welcome this visitor from the Golden State each month, and in return, we will send over the mountains our humble representative of the "Land of steady habits."

---

## TEACHERS WANTING PLACES.

---

Those of our *subscribers* who desire situations can have notice published three months *free*, by addressing B. G. NORTHROP, Secretary of State Board of Education, New Haven.

Committees wishing to employ teachers can also address SECRETARY NORTHROP. Applicants must state years or term of experience, at what college, seminary or school educated; what kind of situation desired and salary expected. The number of the application, and not the name of the applicant, will be published.

**THE AMERICAN JOURNAL OF EDUCATION.**

NATIONAL SERIES—VOLUME VI, 1871.

THE NATIONAL SERIES of the American Journal of Education was commenced in September, 1867, and including the Circulars, Reports, and Documents issued by the Editor as Commissioner of Education, down to the close of 1870, comprises five volumes of 800 pages each, with a full Table of Contents, and a minute Index to each volume.

TERMS:	For a single volume, (I, II, III, IV, V,) in paper cover,	\$4.25
"	" " cloth binding,	4.50
"	" " half goat,	5.50
	For the set of 5 Vols. (I to V,) in paper cover,	\$20 00
"	" " cloth binding,	22.50
"	" " half goat,	25.00

The *Sixth Volume* of the *National Series* will be issued in 1871, in quarterly numbers—the first number for the year, on the 15th of January, and subsequent numbers on the 15th of April, July, and October, making a volume of at least 800 pages, on the following

TERMS: For one copy (Numbers 21, 22, 23, 24) for the year,.....\$4.00  
 " " Number, ..... 1.25

Payable in advance.

All remittances can be made in *money orders* through the Post Office.

All orders will be forwarded by mail, express, or otherwise, according to the direction and at the risk and expense of the persons ordering the same.

*First Series—1856 to 1861.*

THE FIRST SERIES of THE AMERICAN JOURNAL OF EDUCATION consists of ten volumes, each volume having an average of 700 pages, embellished with at least four portraits from engravings on steel of eminent teachers, educators, and promoters of education, and with a large number of wood-cuts illustrative of recent improvements in the structure, furniture, and arrangements of buildings designed for educational uses. Price per volume, \$4.50 in cloth, and \$5.50 in half goat.

*New Series—1862 to 1866.*

A NEW SERIES of THE AMERICAN JOURNAL OF EDUCATION was commenced with the number for March, 1862, and continued to the close of 1866, making six volumes, having an average of 800 pages each, with sixty portraits from engravings on steel, and over two hundred wood-cuts. Price per volume, \$4.50 in cloth, and \$5.50 in half goat.

SETS OF THE AMERICAN JOURNAL OF EDUCATION.

A few complete sets of the AMERICAN JOURNAL OF EDUCATION (Vols. I—XXI) on the following

TERMS: For the entire series, twenty-one volumes, bound in cloth, . . . \$84.00  
 " " " " " " bound in half goat.. 105.00

## CLASSIFIED INDEX.

CLASSIFIED INDEX TO THE CONTENTS OF BARNARD'S AMERICAN JOURNAL OF EDUCATION—Entire Series, Vol. I to XVI, with a GENERAL INDEX to the first five volumes, (I-V), and a minute *Analytical Index* to each volume, (I-XXI), together with the CONTENTS, or INDEX of other publications by the Editor, including several Treatises made up of articles from successive numbers of the Journal, and intended originally to constitute volumes of a Series entitled *Papers for the Teacher*, or THE AMERICAN LIBRARY OF EDUCATION. Price \$2.50.

All communications relating to THE AMERICAN JOURNAL OF EDUCATION can be addressed to HENRY BARNARD.

HENRY BARNARD.

*Hartford, Conn.*

**AN ADDITION**  
—TO THE—  
**STANDARD GEOGRAPHICAL SERIES OF AMERICA.**

**Mitchell's New Outline Maps,**  
**LARGE SERIES.**

The undersigned, encouraged by the remarkable success of

**Mitchell's New Outline Maps,**  
**SMALL SERIES,**

have the pleasure of announcing to teachers and other friends of education, that they will publish

**EARLY IN APRIL,**

AND SOONER, IF POSSIBLE,

**A NEW AND LARGER SERIES,**

**WITHOUT NAMES,**

Political and Physical combined. Beautifully and accurately colored, varnished and mounted on rollers. Accompanied by a Key.

**The Series comprises:**

- |  |  |
|--|--|
| 1. <i>The Hemispheres,</i> size, 55 x 63 in. | 4. <i>South America,</i> size, 55 x 63 in. |
| 2. <i>North America,</i> " 55 x 63 in.       | 5. <i>Europe,</i> " 55 x 63 in.            |
| 3. <i>The United States,</i> " 50 x 78 in.   | 6. <i>Asia,</i> " 55 x 63 in.              |
| 7. <i>Africa,</i> size, 55 x 63 in.          |  |

The Physical features and Political divisions are clearly defined.

A feature **originally** introduced in the smaller series of Maps, is incorporated in this series, viz: An outline of the State of Pennsylvania (area 46,000 square miles) is engraved on the map of each continent, drawn upon the same scale as the map on which it is placed. By this means the comparative size of each country is at once suggested to the eye.

**The Price will be**

**ONLY TWENTY DOLLARS A SET,**

**A Key Gratis with each Set.**

It will be readily seen that this is far cheaper than any other series published, and we believe that

**THIS ADVANTAGE WILL BE APPRECIATED,**

especially when the fact is considered that

**THIS LOW PRICE DOES NOT INTERFERE WITH THE BEAUTY OR ACCURACY**

of the Maps. On all these points,

**MITCHELL'S NEW OUTLINE MAPS, LARGE AND SMALL SERIES,**

challenge comparison.

**They are the Handsomest and Cheapest Maps Published.**

The Small Series is furnished in portfolios or on rollers, as may be preferred. The Large Series is furnished only on rollers. In ordering, please **specify which** kind is desired.

The attention of Teachers, School Officers, and Boards of Education, is invited to both of these Series, as we believe that one or the other will be found

**ADAPTED TO EVERY SCHOOL.**

Send Orders to

**E. H. BUTLER & CO., 611 Market Street, Philadelphia, Pa.,**

Or,

**L. B. PECK, New Haven, Conn.**

# APPROVED SCHOOL BOOKS

PUBLISHED BY

**E. H. BUTLER & CO., Philadelphia, Pa.**

## **Mitchell's New Series of Geographies,**

*More extensively used in Connecticut than any other Series.*

CONSISTING OF

	Retail Prices.
MITCHELL'S FIRST LESSONS IN GEOGRAPHY, . . . .	\$0.50
MITCHELL'S NEW PRIMARY GEOGRAPHY, . . . .	.80
MITCHELL'S NEW INTERMEDIATE GEOGRAPHY, . . . .	1.80
MITCHELL'S NEW SCHOOL GEOGRAPHY AND ATLAS, . . . .	2.50
MITCHELL'S NEW PHYSICAL GEOGRAPHY, . . . .	1.88
MITCHELL'S NEW SERIES OF OUTLINE MAPS AND KEY, . . . .	10.00
MITCHELL'S NEW ANCIENT GEOGRAPHY, . . . .	1.75
HAND-BOOK OF MAP DRAWING, By Peter Keam and John Mickleborough. . . . .	.80

A Special Edition of the NEW INTERMEDIATE is prepared, called the CON-  
NECTICUT EDITION, embracing, in addition to all the matter of the regular edition,  
A NEW MAP OF THE STATE, and FOUR PAGES OF DESCRIPTION.

This Series has been adopted in New Haven, Hartford, New London, Middletown,  
Bridgeport, Norwich, Norwalk, Stamford, Waterbury and in the  
most important towns in the State.

ADOPTED BY THE STATE BOARDS OF

**KENTUCKY, VERMONT AND LOUISIANA.**

Specimen copies furnished to teachers for examination with a view to introduc-  
tion at one half the retail price.

BOARDS OF EDUCATION NOW HAVE AN OPPORTUNITY OF SECURING

## **The Best Text Books on Geography**

At Special Introductory Rates,

By addressing

**L. B. PECK,**

**157 Church Street,**

**New Haven, Conn.**

OR THE PUBLISHERS

**E. H. BUTLER & CO., PHILADELPHIA.**



# Approved School and College Text Books

PUBLISHED BY

**E. H. BUTLER & CO.,**  
**PHILADELPHIA, PA.**

S. C. GOODRICH'S (*Peter Parley's*)

SERIES OF

## PICTORIAL HISTORIES OF THE UNITED STATES

COMPRISING

American Child's Pictorial History of the U. S.,	\$0.84
Pictorial History of the United States, . . .	1.75
—ALSO—	
Goodrich's Pictorial History of England, . . .	1.75
Goodrich's Pictorial History of France, . . .	1.75
Goodrich's Pictorial History of Rome, . . .	1.75
Goodrich's Pictorial History of Greece, . . .	1.75
Goodrich's Pictorial History of the World, . . .	1.75
Goodrich's Pictorial Natural History, . . .	1.75

Teachers wishing to examine these Histories, can obtain them at the following prices: Child's History, 50 cents; all the others at 90 cents per copy.

The most popular Series of School Histories.

USED IN SEVERAL TOWNS IN CONNECTICUT.

Martindale's Primary Speller, - - - - -	20c
Martindale's Complete Speller, - - - - -	20c

NEW—CONCISE—COMPREHENSIVE.

BINGHAM'S NEW ENGLISH GRAMMAR, . . . . .	\$0.84
BINGHAM'S NEW LATIN GRAMMAR, . . . . .	1.50
BINGHAM'S NEW LATIN READER, . . . . .	1.50
BINGHAM'S LATIN EXERCISES, . . . . .	.25
BINGHAM'S CÆSAR, 12mo. . . . .	1.50

The LATEST and BEST Text-Books of their class.

SCHOLAR'S COMPANION—ENGLISH WORDS. The most useful Etymology published. Special rates for first introduction.

Send for Circulars and Recommendations from Leading Educators. Address,

**L. B. PECK, 157 Church Street, New Haven, Conn.**

Or the Publishers, **E. H. BUTLER & CO., PHILADELPHIA.**

Just Published from the Latest Authorities.

# CAMP'S

## PHYSICAL AND POLITICAL

# Outline Maps.

No. 1—The Hemispheres,.....	30 x 50 inches.
" 2—North America,.....	25 x 30 "
" 3—The United States, Dominion of Canada, and Mexico, with separate Maps of Alaska and Newfoundland,	50 x 60 "
" 4—South America,.....	25 x 30 "
" 5—Europe,.....	50 x 60 "
" 6—Asia,.....	25 x 30 "
" 7—Africa.....	25 x 30 "
" 8—Oceanica, with a separate Map of the Sandwich Islands,	25 x 30 "
" 9—Physical Map of the World, on Mercator's projection,...	30 x 50 "

### PRICE OF THE MAPS AND KEY.

Backed with muslin, colored bound, with Rings for suspension, and put

up in a neat Portfolio..... \$20 per set.

Backed with muslin, colored bound, varnished and mounted on Rollers, 30 "

These Maps have a practical value, greatly surpassing that of any other Outline Map. They show such important geographical facts as can be shown on Wall Maps with the greatest benefit to classes, and so much better than has ever been done before, as to elicit the

**Most Unqualified Approval of Teachers and Educators throughout the Country.**

Teachers and Boards of Education have but to examine them to satisfy themselves of their unequalled adaptation to the wants of the school room. Special attention is invited to the following

### IMPORTANT FEATURES:

1st. They are new and accurate, and are engraved and colored in a style never before equaled, either for beauty, or for the distinctness with which every thing is shown.

2d. They combine all the essential characteristics of both Physical and Political Outline Maps, showing each of these features much better than any other Maps of equal size. The Mountain, Lake and River systems, and the principal natural features of each continent, are shown more clearly and more accurately than on any other wall Maps, while a separate Map of the World, on Mercator's projection, is devoted to such features of physical geography as cannot be shown so appropriately in connection with Political Divisions.

3d. The United States and Europe are shown on large maps, each being 50x60 inches, and from two to four times the size on which those countries are generally represented in other sets.

4th. They are the latest, most accurate, best arranged, best engraved, best colored, handsomest, clearest and most complete Outline Maps published, and are not spoiled by having the names of places printed on them.

**C. D. CASE & CO., Publishers,**  
Hartford, Conn.

# Webster's Unabridged Dictionary

## For the School Room.

1840 Pages. 4to. 3,000 Illustrations.

Nearly every State Superintendent of Public Instruction in the Union, or corresponding officer, where such an one exists, has recommended WEBSTER'S DICTIONARY. In the strongest terms. Among them are those of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Maryland, West Virginia, Ohio, Kentucky, Indiana, Illinois, Missouri, Michigan, Iowa, Wisconsin, Minnesota, North Carolina, Alabama, California, and also Canada,—Twenty-four in all.

### STATE PURCHASES.

The State of NEW YORK has placed 10,000 copies of Webster's Unabridged in as many of her public schools. The State of WISCONSIN, above 6,000—nearly every School. The State of NEW JERSEY, 1,500—nearly every School. The State of MICHIGAN made provision for all her schools. The State of MASSACHUSETTS has supplied her Schools—nearly all. The State of IOWA has supplied her schools. The State of CONNECTICUT has made provision for her Schools.

In other States, School Boards of Cities, Counties and Towns, have made provision for supplying their Schools each with a copy.

More than TEN times as many are sold of Webster's Dictionaries, as of any other series in this country. At least FOUR-FIFTHS of all the School Books published in this country own Webster as their standard, and of the Remainder few acknowledge ANY standard.

Can the same amount be expended in any way to benefit Schools, more than by supplying each with a copy of Webster's Unabridged?

Published by G. & C. MERRIAM, Springfield, Mass.

**SOLD BY ALL BOOKSELLERS.**

---

## Connecticut State Normal School,

NEW BRITAIN, CONN.

---

This Institution is now in successful operation, with a large number of pupils. It is under the direction of the State Board of Education, and is strictly professional in its designs,—aiming to prepare pupils, in the best possible manner, for the work of organizing, governing, and instructing the schools of the state. Thorough instruction is here given, *first*, in the branches of the study required to be taught in the public schools, and, *second*, in the best methods of teaching those branches.

Applicants for admission must be at least sixteen years of age, must declare their full intention of teaching in the public schools of Connecticut, and must pass a satisfactory examination in Reading, Spelling, Writing, Arithmetic, Geography and English Grammar.

Examination for admission is held on TUESDAY, the first day of each term, at 10 o'clock, A. M.

The present term, (which began Dec. 6th,) will close March 28. The Summer Term of 13 weeks, will open Tuesday, April 12, and close July 11.

For Catalogue, address, at New Britain.

**I. N. CARLTON, Principal.**

# Important Educational Publication.

## NOW READY THE ECLECTIC SERIES OF GEOGRAPHIES,

By A. VON STEINWEHR and D. G. BRINTON.

The Series consists of three books: **PRIMARY, INTERMEDIATE, and SCHOOL GEOGRAPHY.** Though each book of the series differs from the others in scope and treatment, the arrangement of topics and materials is the same in all. Each book is divided into a **GENERAL** and a **DESCRIPTIVE** part: the general part containing the necessary definitions and explanations of the three branches of the science—**Mathematical, Physical, and Political Geography**; the descriptive part treating of the continents, their physical features, political divisions, inhabitants, etc.

### ARRANGEMENT.

The maps are printed on a left hand page, and are followed by three or more pages of text. The descriptive part treats of geographical topics in the following order: (1) Position, (2) Surface, (3) Rivers and Lakes, (4) Climate and Vegetation, (5) Inhabitants, (6) Political Divisions and Cities. Questions on the text are added. The teacher is furnished with every means to insure success, and is not forced, at each step, to classify a mass of isolated, heterogeneous facts, or to add an extended commentary of his own.

### THE MAPS.

Special attention is called to the **Maps**, which, in correctness and artistic execution, are greatly superior to those of any other Series of School Geographies.

Our own country is fully represented on seven **Sectional Maps**. The old historical division into four groups has been discarded, the addition of new States and Territories in the West having made those groups so very unequal in extent. The division adopted is **BASED UPON THE PHYSICAL FEATURES OF THE COUNTRY**, a grouping at once natural and useful for purposes of instruction.

### GRADATION.

The **Primary Geography** contains the first principles of the science, stated in plain, simple language.

The **Intermediate Geography** contains sufficient materials for a complete course in a majority of schools; thus rendering more than two books unnecessary except in the more closely graded schools of cities and villages. The **Map-Drawing Lessons** are placed after the descriptions of the continents and political divisions.

The **School Geography** is designed to complete the course. The various topics are more fully treated in this book than in the Intermediate, and it contains a complete outline of Mathematical and Physical Geography.

**Review Questions** and a **Pronouncing Vocabulary** have been added to each book, and very full **Physical and Statistical Tables** to the Intermediate and School Geographies.

### BEAUTY OF ILLUSTRATION.

The numerous wood-cut illustrations of the Series have been designed and engraved by the best artists of the country, and no expense has been spared to render the series beautiful, interesting, and in a marked degree, teachable and instructive.

**RETAIL PRICE** of the Primary Geography, 85c. Intermediate Geography, \$1.60. School Geography, \$2.00.

**SINGLE SPECIMEN COPIES**, by mail, postpaid, for examination with a view to introduction—Primary, 50c. Intermediate, \$1.00. School, \$1.25.

Parties desirous of introducing the **ECLECTIC SERIES OF GEOGRAPHIES** are respectfully invited to correspond with the publishers.

**WILSON, HINKLE & CO., Cincinnati, O.,**

Or **JOHN HOBBS, Corresponding Agent, care Clark & Maynard, 5 Barclay St., N. Y.**

# A. S. Barnes & Co's Newest Books

Little Speeches for Little Folks.

## The Child's Speaker

By CHAS. NORTHEED, A. M.

AUTHOR OF

Little Speaker, Little Orator,  
National Orator, Entertaining  
Dialogues, Teachers's Assistant,  
etc. Published June 30, 1870:

An Entirely New Selection  
FOR THE

VERY YOUNGEST PUPILS.

Price 60 cts., post-paid.

## "Old Sausage Links."

This epithet, applied first in derision,  
has become almost a term of affection,  
often used playfully by the warmest  
friends of the "Diagram Grammar."  
Prof. Clark is just issuing an entirely  
new book.

Clark's Normal Grammar.

Price \$1, post-paid.

EMBRACING

THE PERFECTED SYSTEM.  
with all the features of detail that were  
objected to by the most carping critics of  
his older books REMOVED OR MADE UN-  
OBJECTIONABLE.

## "How to Teach Map Drawing."

—ON—

JEROME ALLEN'S

## ONLY SYSTEM,

BY A

Fixed Unit of Measurement.

Sent to any Teacher on receipt of  
Stamp, FREE.

Art Principles.

—O—

## The American Drawing Book.

By J. G. CHAPMAN, N. A.

A Manual for the Amateur, and Basis  
of Study for the Professional Artist.  
Adapted for Schools and Private Instru-  
ction.

PRICE \$6.

To be had of Dealers, or from the  
Publishers, by mail, post-paid, on receipt  
of price.

The Perfection of Common  
School Books.

## INDEPENDENT Series of Readers.

By J. MADISON WATSON.

IN FIVE NUMBERS.

"Alternates of the National Series."  
This beautiful, Compact, and Cheap  
Series furnishes the most available, in-  
structive, and practical course for Common  
Schools. They embrace

MANY IMPROVEMENTS

not found in any other series extant.

The entire set, for examination, post  
paid,

Two Dollars.

## Smith's Etymology, ABRIDGED.

In response to many calls for a smaller  
and cheaper manual on the plan of the

CELEBRATED

## Complete Etymology,

By WM. M. SMITH,

The same author has prepared a

## Condensed Etymology

For Common Schools.

Price 75 Cts.

embracing all the principal Derivations  
from the

Anglo Saxon,	Welsh,
Gothic,	French,
Gaelic,	Dutch,
German,	Swedish,
Italian,	Latin,
Danish,	Greek.

Echoes from Foreign Capitals.

French--German.

## WORMAN'S CONVERSATION MANUALS,

For Schools and Private Students.

1. "Echo de Paris," or  
French Echo, \$1.25.
  2. "Deutsches Echo," or  
German Echo, \$1.25.
- On an Entirely New Plan.

The Story of the Rocks.

A Fourteen Weeks' Course  
IN

## GEOLOGY,

By J. DORMAN STEELE, A. M.

AUTHOR OF 14 WEEKS IN

ALL THE SCIENCES.

Celebrated for Brevity, Lucidity, In-  
terest, Instruction, in rare degree.

50,000 VOLUMES  
SOLD ALREADY.

"MONARCH OF ALL IT SURVEYS."

A NEW BOOK

BY

## DR. CHARLES DAVIES,

"DAVIES' SURVEYING" has been for  
TWENTY-SIX YEARS the standard text-  
book, without material revision. The  
Professor has now re-written, to com-  
plete his "New Series" and the labors of  
an untiring lifetime.

DAVIES'

## New Surveying,

Price \$2.50, post-paid.

ALSO JUST PUBLISHED

## Peck's New Mechanics.

For Intermediate Classes.

EDITIONS DE LUXE.

## Prof. EDW. SEARING,

EDITOR OF THE

## RARE VIRGIL'S ÆNEID

CONTEMPLATES

Editing a full series of the best Latin and  
Greek Authors in similar style.

The next in course will be

## Homer's Iliad,

With all the Great Features.

To be published in a few mos.

## A Well of English Undeified.

—O—  
CLEVELAND'S COMPENDIUMS

## OF English Literature,

IN FOUR VOLUMES, VIZ.

English Literature,  
Do. of 19th. Century,  
American Literature,  
Classical Literature.

Price \$2.50 Each.

Will hereafter be published by

A. S. BARNES & CO.

Publishing Office, 111 & 113 William St., N. Y.

# D. APPLETON & CO'S Standard School Text Books.

## CORNELL'S GEOGRAPHIES.

**THE BEST!      THE CHEAPEST!      THE MOST POPULAR!**

First Steps in Geography,	\$0 45	New Physical Geography,	\$1 60
New Primary Geography,	0 90	Cornell's High School Geography	
New Intermediate Geography,	1 50	and Atlas,	
New Grammar School Geography,	1 75	Cornell's Series of Outline Maps.	

These GEOGRAPHIES are Celebrated for their

Philosophic Arrangement.	Beauty and Accuracy of Maps.
Gradual Progression.	Consistency between Maps and Text.
Presentation of Useful Facts.	Precision in Statement.
Absence of Useless Matter.	Thoroughness and Completeness.

Endorsed by the best teachers in the country, and used in the leading cities of the Union.

## QUACKENBOS'S ARITHMETICS.

Primary Arithmetic,	\$0 30	Practical Arithmetic,	\$1 00
Mental Arithmetic,	0 45	Key to Practical Arithmetic,	0 20
Elementary Arithmetic,	0 50	Higher Arithmetic, (in Press.)	

### SUPERIOR FEATURES.

Full discussions of subjects omitted in other Treatises.

Explanations of Commercial Usages.

Exactness and clearness in Definitions and Rules.

Extra attention to Business Matters, such as Taxes, Insurance, Securities, etc.

## GRAMMAR AND COMPOSITION.

By G. P. QUACKENBOS, LL. D.

First Book in Grammar,	\$0 50	Philosophy,	\$1 75
English Grammar.	1 00	History of the United States,	1 75
First Lessons in Composition,	0 90	Elementary History of the United	
Composition and Rhetoric,	1 50	States,	0 75

THE MOST SUCCESSFUL SERIES IN USE.

## HARKNESS' LATIN SERIES.

Introductory Latin Book,	\$1 25	Introduction to Latin Prose,	\$1 50
Elements of Latin Grammar,	1 25	First Greek Book,	1 50
Latin Grammar,	1 50	Cæsar,	1 50
Latin Reader,	1 50		

These books furnish a better course of Elementary Classical Instruction, than can elsewhere be found in our Language, and they have obtained an UNPRECEDENTED POPULARITY.

☞ No other Series is so extensively used, and so universally commended.

Youman's First Book of Botany,	- - - - -	\$1 25
Lookyer's Elements of Astronomy,	- - - - -	1 60

**D. APPLETON & CO., New York,**  
**WILLIAM HENSHAW, Agent for New England.**

AT LEE & SHEPARD'S BOOK STORE.

No. 149 Washington Street, Boston.

**HENRY H. PECK,**  
**PUBLISHER,**  
WHOLESALE AND RETAIL  
**BOOKSELLER, STATIONER,**

AND  
Blank Book Manufacturer,  
No. 346 Chapel Street, New Haven, Conn.

Keeps constantly on hand all the various kinds of

**SCHOOL BOOKS,**

USED IN THE CITY AND STATE.

.....  
**MISCELLANEOUS BOOKS**

in every department of Literature. Public and Private Libraries are supplied on the most liberal terms, and correspondence is invited with

COMMITTEES, TEACHERS, PROFESSIONAL MEN AND BOOK  
BUYERS GENERALLY.

He has the largest stock of

**SCHOOL REWARD CARDS AND TICKETS,**  
**And School Stationery**

to be found in New Haven. Also books suitable for GIFTS and PRIZES.

.....  
**THE BINDING ROOMS**

are fitted up with the latest and best machinery and supplied with skillful and experienced workmen.

BINDING in any style, or after any desired pattern.

MAGAZINES, PAMPHLETS, BOOKS,  
MUSIC, NEWSPAPERS, CATALOGUES, ETC.  
AND BLANK BOOK WORK, OF ALL KINDS.

**Special Terms to Teachers and Schools Committees.**

REMEMBER

REMEMBER

**HENRY H. PECK,**  
**346 Chapel Street.**



## A NEW WORK FOR SCHOOLS.

# A Treatise on Physiology and Hygiene.

By DR. JOSEPH C. HUTCHISON, *President of the New York Pathological Society; Vice-President of the New York Academy of Medicine; Surgeon to the Brooklyn City Hospital; and late President of the Medical Society of the State of New York.*

### HANDSOMELY ILLUSTRATED.

The demand for a book on these subjects, adapted to the wants of High-Schools, Academies, Seminaries, and Colleges, is general; and the publishers believe this work, written by one who is a master of the subjects, will fully meet such demand.

1. THE PLAN OF THE WORK is to present the leading facts and principles of human Physiology and Hygiene in language so clear and concise as to be readily comprehended by pupils in schools and colleges, as well as by general readers not familiar with the subject.
2. THE STYLE is terse and concise, yet intelligible and clear; and all useless technicalities have been avoided.
3. THE RANGE OF SUBJECTS TREATED includes those on which it is believed all persons should be informed, and that are proper in a work of this class.
4. THE SUBJECT-MATTER.—The attempt has been made to bring the subject-matter up to date, and to include the results of the most valuable of recent researches to the exclusion of exploded notions and theories. Neither subject—Physiology or Hygiene—has been elaborated at the expense of the other, but each rather has been accorded its due weight, consideration, and space. The subject of Anatomy is incidentally treated with all the fullness the author believes necessary in a work of this class.
5. GYMNASTICS.—In the chapter on the Muscles are found directions for gymnastic exercises, sufficient, it is believed, for the wants of most schools.
6. THE CHAPTER ON THE USE OF THE MICROSCOPE in the study of Physiology, contains very valuable information, and will add greatly to the interest of the scholar in his investigation of the subject.
7. A CHAPTER ON POISONS, Drowning, etc., is added, with remedies; also, a full Pronouncing Glossary.
8. THE ARRANGEMENT for the use of the book in the class-room, it is believed, will be found satisfactory. It is properly divided into paragraphs, with one set of questions at the bottom of the page, and another for topical reviews, at the end of the chapters.
9. THE ENGRAVINGS are numerous, of great artistic merit, and are far superior to those in any other work of the kind, among them being two elegant colored plates—one showing the Viscera in Position, the other, the Circulation of the Blood.
10. THE SIZE of the work will commend itself to teachers. It contains less than 300 pages, and can therefore be easily completed in one or two school terms.

The publishers are confident that teachers will find this work full of valuable matter, much of which cannot be found elsewhere in a class manual, and so presented and arranged that the book can be used both with pleasure and success in the school-room.

## WHAT IS SAID OF IT.

*From Prof. Austin Flint, Jr., Professor of Physiology in Bellevue Hospital Medical College, New York City, and author of "Physiology of Man," etc., etc.*

It seems sound, compact, and just the thing for schools, and I sincerely hope that it may be appreciated for what it is worth, for we are certainly in need of books of this kind. I congratulate you on its excellence in matter, manner, and appearance.

*From Prof. D. G. Eaton, Professor of Natural Science, Packer Collegiate Institute, Brooklyn, New York.*

After a somewhat careful examination of Dr. Hutchison's Physiology, I am satisfied it is better adapted to the use of schools than any other text-book on that subject with which I am acquainted. I trust it will find a ready sale and be introduced into all our schools.

*From Prof. James P. White, M.D., Professor of Obstetrics, Buffalo Medical College, N. Y.*

It is, in my opinion, incomparably superior to any of its predecessors.

*From the Hon. Henry Kiddle, Superintendent of Schools, New York City.*

Dr. Hutchison's recently published "Treatise on Physiology and Hygiene," seems to me to be a most excellent work. The matter is well selected and arranged, and the topics treated in a lucid and interesting manner. Its copious and beautiful illustrations, and its various lists of "Questions for Topical Review," make it not only an attractive but very convenient class manual.

*From Prof. John Ordronaux, Professor of Physiology in the University of Vermont and also in the National Medical College, Washington, D. C.*

I have read it from preface to colophon, and find it a most desirable text-book for schools. Its matter is judiciously selected, lucidly presented, attractively treated, and pointedly illustrated by memorable facts; and, as to the plates and diagrams, they are not only clear and intelligible to beginners, but beautiful specimens of engraving. I do not see that any better presentation of the subject of physiology could be given within the same compass.

*From Prof. Samuel G. Armor, M.D., Professor in Long Island College Hospital, late Professor in Michigan University.*

I have carefully examined Hutchison's Physiology and Hygiene, and take great pleasure in stating that I regard it as a most excellent summary of the essential and well ascertained facts of physiological sciences. The text is remarkably concise and free from technicalities, and yet with a clearness of statement and an attractive simplicity and fullness of illustration which renders the work admirably adapted to purposes of instruction. Many of the popular works on physiology now in use in schools, academies, and colleges do not reflect the present state of the science, and some of them abound in absolute errors in statement of facts. The work which Dr. Hutchison has given to the public is free from these objectionable features, and as such I give it my hearty commendation.

*From Prof. Frank H. Hamilton, M. D., Professor of Surgery, Bellevue Medical Hospital College, New York.*

It supplies a want which has long been felt in one of the most important departments of elementary teaching. Similar works have been written, but this is the first which I have seen written by a thorough student and master of his subject.

*From Noah K. Davies, LL.D., President of Bethel College, Russellville, Ky.*

It is an admirable school-book, better than any of many I have seen. We adopt it, and will have a class in it next term.

*From Pennsylvania School Journal.*

This is the most attractive text-book on the subject that has come under our notice. The type is large, there does not seem to be too much matter, and the illustrations, excellent in themselves and printed on heavy paper, serve admirably in conveying definite impressions upon each division of the subject treated. Read Jean Mace's "Mouthful of Bread," and "Servants of the Stomach" along with the study of this work, and we do not see that the matter of Physiology can be better presented either for pupil or teacher.

*From Prof. Homer B. Sprague, Principal of Adelphi Academy, Brooklyn, N. Y.; late Professor of Rhetoric at Cornell University, N. Y.*

Your "Physiology and Hygiene" is a charming treatise, and is admirably adapted for use as a text-book in schools. By its preparation you have rendered a real service to the cause of education.

*From the New York World.*

The misfortune of most popular treatises on hygiene, or upon any other specialty, is that they are written by unprofessional and incompetent persons. Dr. Hutchison, however, is well known as an accomplished and scientific physician, and his competency, so far as medical knowledge goes to the composition of such a treatise, is unquestionable. Moreover, the literary execution of the work is excellent. It is clear and practical, and illustrated with all the engravings needful to a full understanding of the text.

*From the Maine Journal of Education.*

It is well written, free from unnecessary technical terms, and very finely illustrated; some of the plates are the best we have seen. It is designed for schools and general readers, and is, we think, worthy of extensive introduction.

*From the New York Medical Record.*

This work is designed mainly for a text-book in schools and academies, and consequently treats of the various subjects connected with physiology and hygiene in an elementary manner. It is written in a wonderfully concise style, and, for a work of its size, we are surprised at the amount of useful information it contains. The descriptions of the various apparatus and their functions are rendered practically interesting to the young student by the skillful interpolation of many very valuable collateral hints, comparisons, and facts. The illustrations are admirable and well chosen, and, with a copious glossary, leave nothing to be desired in the way of making every part of the work perfectly intelligible to the merest tyro. We unhesitatingly recommend it to the teachers of the young as one of the best works of the kind that has been published, and predict for it a well deserved popularity.

*From the Massachusetts Teacher.*

Concise in style and intelligently written. It has the characteristics of a good text-book. The subject upon which it treats, notwithstanding its importance, and all that has been said in reference to that importance, is still too much neglected in our schools.

*From Prof. White, Professor of Natural Sciences in Iowa State University. (In the "Iowa Union.")*

This new addition to the already numerous text-books upon physiology and hygiene is among the best we have examined. The author proceeds with his subject in that straightforward, direct manner which is so satisfactory to the student and teacher, and the subject-matter is conveniently and naturally arranged. It seems to have been the author's aim, while including all the latest facts of the science, to present nothing but such as is the common property of all physiologists. Therefore, his book is free from those personal "hobbies" which mar so many of our text-books on this subject.

*From John P. Gray, M. D., Superintendent of New York State Lunatic Asylum, Utica, New York.*

I have read it carefully. It will meet a want—a great want—and it is admirably adapted in arrangement, language, etc., for instruction in schools.

*From Prof. George F. Barker, M. D., Professor of Physiological Chemistry in Yale College, and author of Barker's Elements of Chemistry (In College Courier).*

Of course, from the well known reputation of Dr. Hutchison as a medical man, we expected that his work would be accurate, well written, and fully up to the times. In this we are not disappointed. In an easy, familiar style, the author describes the organs of the body, their proper functions, and the means to be employed in preserving their healthy action; considering in this their anatomy, physiology, and hygiene in an informal way, which is so attractive to the student, and at the same time is instructive to the general reader. Of course, the anatomy and physiology will be at once conceded sound, but in these days when every smattering in these things pushes into notice his crude theories of hygiene, each different from the other; when treatises on health, and health journals, often wholly unreliable and sensational, load our bookshelves and are eagerly sought by a people ardently hoping to find in them the elixir of life, we imagine Dr. H.'s judicious and excellent hygienic views will be criticized. If Dr. H.'s book could be read and followed by these people, they might not find the elixir of life, it is true, but it is quite certain they would secure to themselves a longer life in which to look for it.

*From the New York Times.*

The line of Pope—

"The proper study of mankind is man"—

might fairly be the motto of this book, which instructs the reader in everything most needful to be known respecting his own physical system and the means and observances by which it may best be kept in a condition of good order and healthful activity—a science which should be learned before any other science in the schools, but which is too often left out of the curriculum altogether.

*From the Christian Union (Rev. Henry Ward Beecher, editor), New York.*

The author presents this subject in a familiar style, adapted to the easy comprehension of those who wish to know something of themselves and how to take care of themselves, without going too deeply into physiology, or being perpetually fretted by technical language. The instructions are founded on the accepted views of the best physiologists and the most careful conclusions of science. One could expect nothing less from a physician of the high standing of Dr. Hutchison. There is so much trash now popularly afloat, started and pressed on public notice by charlatans and quacks for purposes of notoriety and gain, that such substantial instruction as this is doubly welcome.

*From Hall's Journal of Health.*

This work is well written, scientific, and practical, and if read and heeded in every family in the land, would add largely to the average of human health, happiness, and life.

The volume is printed in the very best manner, on elegant paper, and large type, and is attractively bound. Retail Price, \$1.00. A copy will be sent to Teachers for examination on receipt of half-price. *Very liberal terms for first introduction.*

Published by CLARK & MAYNARD,

5 Barclay Street, New York.

**1835. "Greenleaf alone stands the Test of Time!" 1870.**

---

## **Greenleaf's Mathematical Series.**

**A Complete Course for all classes of Learners. Clear  
and Comprehensive. Practical and Scientific.  
Meritorious and Economical.**

Built up and perfected, as demanded by educational progress, it has constantly baffled competition, and acquired a popularity in all parts of the Union, so as to have become

### **A NATIONAL STANDARD.**

For thirty-five years Greenleaf has stood the ordeal of the school-room, and inaugurated in mathematical teaching

### **A GREAT REVOLUTION.**

District Schools, Union Schools, High Schools, Normal Schools, Academies, Seminaries, and Colleges, have adopted books of the series, and now use them with entire satisfaction. The fact that about

### **1,000,000 COPIES ARE NOW IN USE**

in the schools of the country, is proof both of the merit of Greenleaf's system, and of its unparalleled success.

GREENLEAF'S NEW PRIMARY, NEW ELEMENTARY, or NEW INTELLECTUAL and NEW PRACTICAL Arithmetics form a time-saving and labor-saving course,

### **COMPLETE IN ONLY THREE BOOKS,**

costing at retail only \$1.65. By their use, in comparison with certain *crude, over-loaded, and extended* courses of five or more books, it is safe to say that the learner may not only make better progress, but, at least,

### **SAVE TWO YEARS OF VALUABLE TIME.**

GREENLEAF'S NEW ELEMENTARY ALGEBRA, NEW HIGHER ALGEBRA, GEOMETRY, and TRIGONOMETRY, form a course for higher schools and colleges, of unsurpassed excellence,

**Convenient and Useful.**

**ROBERT S. DAVIS & CO., Publishers, Boston.**

## Evidence of Merit.

GREENLEAF'S SERIES, in whole or part, has been adopted for, and is now used by,

<i>Amherst College,</i>	<i>Mass.</i>	<i>Manhattan College,</i>	<i>N. Y.</i>
<i>Mass. Agric'l College,</i>	<i>"</i>	<i>Brown University,</i>	<i>R. I.</i>
<i>College of the Holy Cross,</i>	<i>"</i>	<i>Bowdoin College,</i>	<i>Me.</i>
<i>State Nautical School,</i>	<i>"</i>	<i>Colby University,</i>	<i>"</i>
<i>Wesleyan University,</i>	<i> Ct.</i>	<i>Bates' College,</i>	<i>"</i>
<i>Russell's Collegiate Institute,</i>	<i>"</i>	<i>Maine Agricultural College,</i>	<i>"</i>
<i>Norwich University,</i>	<i> Vt.</i>	<i>Rutgers' College,</i>	<i>N. J.</i>
<i>Mt. Anthony Seminary,</i>	<i>"</i>	<i>Antioch College,</i>	<i> O.</i>
<i>Phillips' Exeter Academy,</i>	<i>N. H.</i>	<i>Normal University,</i>	<i> Ill.</i>
<i>Rutgers' Female College,</i>	<i>N. Y.</i>	<i>Westchester Military Academy,</i>	<i> Pa.</i>
<i>Wesleyan Sem. and Female Coll.,</i>	<i> Me.</i>	<i>Mass. Institute of Technology,</i>	<i> Mass.</i>
<i>Oakland Female College,</i>	<i> Cal.</i>	<i>Worcester Co. Industrial School,</i>	<i>"</i>
<i>Lancaster Academy,</i>	<i> Pa.</i>	<i>French's Commercial College,</i>	<i>"</i>
<i>Western University,</i>	<i>"</i>	<i>Wilbraham Academy,</i>	<i>"</i>
<i>Washington University,</i>	<i> Mo.</i>	<i>Williston Seminary,</i>	<i>"</i>

and for hundreds of like institutions, including **16 STATE NORMAL SCHOOLS** and **9 COMMERCIAL COLLEGES.**

## GREENLEAF'S ARITHMETICS

have been approved for, and are now used in, the Public Schools of

**NEW YORK CITY, NEW ORLEANS,**

and many other Cities, and have been recently introduced into upwards of

**5,700 SCHOOLS**

in the Eastern and Middle States, including *entire uniformity* in numerous counties.

GREENLEAF'S is the Standard in upwards of

**1,000 CITIES AND TOWNS**

in the New England States.

*Greenleaf's is the only Arithmetical Series, at the present time [1870], that has a State adoption by any of the Eastern States.*

## THE GREAT TRIUMPH

has been achieved by merit, not by "liberal inducements," or by "tricks of agency;" so that while many systems have flourished but a short time, Greenleaf's system has continued steadily

**ON VICTORY'S PATH!**

**ROBERT S. DAVIS & CO., Publishers, Boston.**

## Eminent Testimony.

---

*Prof. E. D. Sanborn, Dartmouth College, says: "Greenleaf's works have all a deserved popularity, and their general use attests their excellence. The most experienced teachers adopt and commend them."*

---

*Rev. George Gannet, Chester Park Young Ladies School, Boston: "As a matter of preference, I have for several years used the Mathematical Series of Prof. Greenleaf."*

---

*Prof. J. B. Chase, Russell's Collegiate Home Institute, New Haven: "We use Greenleaf's entire Series of Mathematics, and consider the books unsurpassed by any in use."*

---

*Prof. Charles French, French's Mercantile College, Boston: "During many years Greenleaf's Arithmetics have been used in this institution, and although many others have been urged for adoption, I have seen no reason to make a change."*

---

*Prof. David B. Scott, Grammar School No. 40, New York City: "No Arithmetics, in my opinion, have kept for so long a time a more deserved share of public favor than Greenleaf's."*

---

*Prof. Wm. F. Wyers, Westchester Military Academy, Pa.: "I have had Greenleaf's Series of Arithmetics in use in my school exclusively for some years, and always considered it "*facile princeps*" of the many treatises on that subject."*

---

*Prof. S. S. Greene, Brown University, R. I.: "Greenleaf's New Higher Algebra, in my opinion, is among the very best text-books for a university course."*

---

*Prof. H. W. Super, Keystone Normal School, Pa.: "Greenleaf's excellent series is very extensively used in our Normal District, and in many parts of it, exclusively."*

---

*Prof. of Mathematics, Wilbraham Academy, Mass.: "Greenleaf's New Practical Arithmetic gives general satisfaction, and is the only written Arithmetic used in this school; it is comprehensive enough for any class without a higher Arithmetic."*

---

*Henry L. Chapman, Tutor in Bowdoin College, Me.: "I am satisfied, from the use of some of Greenleaf's Mathematical Text-Books, in teaching, and from an examination of others of the series, of their general excellence and adapt-  
edness to the recitation and school-room. The New Higher Algebra has been adopted as a text-book in this institution."*

---

*Sisters of St. Joseph, Carondelet, Mo.: "For simplicity, exactness, and completeness, we think the series the best of the kind, and we have therefore adopted it in all our schools."*

---

*Prin. George W. Yates, Mount Anthony Seminary, Vt.: "My classes have always done best in Greenleaf, and I have taught from his books with more pleasure than from any others."*

*Bro. Patrick, Manhattan College, New York City:* "For classes of beginners, Greenleaf's New Primary and New Elementary Arithmetics furnish an attractive course of easy lessons, well calculated to develop thought and advance the learner by orderly gradations."

---

*Prof. D. C. Stone, Oakland Female College, Cal.:* "I have used Greenleaf's Arithmetics for several years, and am not at all disposed to change."

---

*Prin. A. P. Stone, Public High School, Portland, Me.:* "Greenleaf's Elementary Algebra has been adopted as a text-book in this school, and gives good satisfaction."

---

*Prin. W. L. P. Boardman, now of Lewis School, Boston:* "The improvements contained in the New Practical Arithmetic, make it, in my estimation, one of the very best books before the public."

---

*Vermont Board of Education:* "Greenleaf's New Practical has greater merits as a text-book than any other similar book."

---

*Supt. J. B. Storms, Monroe County, Pa.:* "Since the publication of the Elementary Arithmetic, I consider Greenleaf's the best series published, and is the only one used to any extent in this county."

---

*School Commissioners F. W. Gilley and Geo. W. Smith, Westchester Co., N. Y.:* "We have found Greenleaf's Arithmetics have been largely used in our schools, and they carry the suffrages of our best and most able teachers."

---

*Sidney Brooks, Teacher State Nautical School, Boston:* "The New Practical Arithmetic, after a trial of six months on board the Schoolship, is increasing in favor with teachers and pupils."

---

*Supt. J. H. Zelig, Public Schools, Kingston, N. Y.:* "All of our teachers are pleased with the New Arithmetics, and we unhesitatingly affirm that, in our opinion, Greenleaf's Series is the best."

---

*Prof. Thomas Metcalf, Normal University, Ill.:* "Several months' use of Greenleaf's New Practical Arithmetic warrants me in saying that the high claims urged by the author, are, with rare exceptions, well sustained."

---

*Prin. J. A. Nichols, Public School No. 2, Yonkers, N. Y.:* "My opinion of Greenleaf's System, after a satisfactory trial, is that of unqualified approbation."

---

*Prin. W. J. Cortell, Public High School, Calais, Me.:* "Greenleaf's Mathematics have been adopted for the schools of this city, and I shall advocate their introduction throughout the county."

---

*Prof. W. V. Davis, Lancaster Academy, Pa.:* "The New Elementary Arithmetic works well. The New Practical is all that any teacher should desire. The longer I use it the better I like it."

---

*Prin. A. C. Brackett, Storer Normal School, W. Va.:* "We shall hereafter use Greenleaf's Arithmetics, and no others, in this institution."



*Supt. Fred. J. Frelinghuysen, Somerset Co., N. J.:* "Greenleaf's Series of Mathematics is recommended to be used in the public schools of this county."

---

*Co. Examiner S. R. Morse, Atlantic Co., N. J.:* "We have introduced Greenleaf's Series into the schools of this county."

---

*Dr. Geo. C. Brown, Mount Holly, N. J.:* "We have finally returned to Greenleaf's, believing that series to be better suited to the wants of our schools than any other."

---

*Prin. Samuel Allen, Friends' School, Philadelphia:* "The New Elementary Arithmetic is an admirable work; just the book we much needed."

---

*Supt. E. J. Young, Lehigh Co., Pa.:* "Greenleaf's entire series gives great satisfaction to teachers and students, and it is undoubtedly the best."

---

*Prin. A. E. Gibbs, Westfield High School, Mass.:* "Experience has fully established our confidence in Greenleaf's works."

---

*Prin. F. A. Waterhouse, late of Augusta High School, Me.:* "Such really excellent books deserve the popularity which they have gained."

---

*Prin. L. P. Blood, Hagerstown Academy, Md.:* "In discarding all obsolete tables and unusual business rules, which are entirely out of place in a school arithmetic, and in the introduction of new matter relevant to present business requirements, the editor of the Practical Arithmetic has made great improvements."

---

*Prin. J. S. Hart, State Normal School, N. J.:* "We have been using Greenleaf's New Practical Arithmetic for some time in this school, and are very much pleased with it."

---

*Supt. Wm. H. Reed, Salem Co., N. J.:* "I have recommended the use of Greenleaf's Arithmetics in the public schools of Salem County, believing them to be excellent works."

---

*Prof. Chas. H. Verrill, Prin. State Normal School, Mansfield, Pa.:* "I regard Greenleaf's New Practical Arithmetic the best work of the kind ever published."

---

*Prin. J. Thompson, Public Schools, White Plains, N. Y.:* "Two years' experience with Greenleaf's New Practical Arithmetic, convinces me that it is the best work of the kind I have seen."

---

*Prof. R. Woodbury, Western Normal School, Me.:* "Greenleaf's Geometry and Trigonometry, which I am using, I like well."

---

*Rev. H. P. Torsey, Wesleyan Seminary and College, Me.:* "We are now using Greenleaf's Elementary and Higher Algebra, and like them."

---

*Prof. Selden J. Coffin, Lafayette College, Pa.:* "Greenleaf's New Higher Algebra, by its judicious arrangement, and the practical nature of the examples, commends itself to the favor of teachers."



## Reconstruction.

---

The appearance of GREENLEAF'S NEW PRACTICAL ARITHMETIC caused no little excitement in certain circles. The book was upon a new plan—*out of the old ruts*—and was first issued in a proof form, to run the gauntlet of free criticism before being put in a permanent form.

Parties interested in the success of previously existing books, had no kindly greeting for the new candidate for popular favor, and finally united very generally in carping criticism—it pleased none of them. In this respect, it was soon found that they and the educational public were not in agreement.

The practical teacher and progressive educator saw at a glance that *the new book had made important steps in advance*, that it had, indeed, inaugurated a great reform, and that though rival arithmetics on the old system would suffer, the schools would gain.

For a whole year, friendly and unfriendly criticisms continued to be brought to the notice of the editor of the New Practical before the work was put in its permanent shape, that it might be given to the public so nearly perfect as not to require in the future any considerable change. The wisdom of constructing a text-book in this way is now apparent.

Since the publication of Warren Colburn's First Lessons, perhaps *no other has ever initiated as great a revolution*. It makes written arithmetic intellectual. It relieves the study of much useless labor by simplification of processes, and by the exclusion of obsolete and unimportant material. The effect, though revolutionary, is extremely reformatory.

One of the effects is seen in the many attempts to bring rival and competing books up to its standard. It is really wonderful to see how generally arithmetical books are being revamped to conform to the new condition of things. It is, however, to be regretted that these laudable attempts to subserve the cause of education have not been blessed with the desired results. In some instances, the putting of new cloth into old garments, or new wine into old bottles, have only made matters worse. Yet still, the *reconstruction* goes on, and where it will stop no one can now tell. *It is certain that Greenleaf's New Practical at present is immensely ahead*, and that all imitations of it only make the superior merits of that work the more conspicuous, and its continued success the more assured.

The fact that Greenleaf's New Practical is being everywhere sought for, and taken at fair introduction rates, while agents of would-be reconstructed rival books have become obliged to hold out peculiar "liberal inducements," and "even exchange" in competition, is of itself sufficient evidence as to which side sets the strong current of educational sentiment.—*Educational Gazette, N.Y.*

## Benjamin Greenleaf.

---

Few men in our country have been more widely known in the profession of teaching, than was Mr. Greenleaf. And few, it is believed, have succeeded better in securing the affection and lasting respect of their pupils. He was peculiar—always like himself, and never like another, but his heart was ever kind and generous, and his efforts earnest and disinterested for the good of his scholars. He was Preceptor of Bradford Academy from the year after his graduation at Dartmouth to the time when the school ceased to be open for both sexes, and was converted into an institution for young ladies. He afterwards established and took charge of "Bradford Teachers' Seminary," which occupied most of his time for nine years. During his connection with the Academy and Seminary, the number of his pupils was about *three thousand*,—more than two hundred and fifty of whom became members of College, and more than forty of whom entered the Christian ministry.

Teaching was the business in which he delighted, and whether the lesson was in Latin, Greek, or English, and especially if it were in Mathematics, he was earnest, enthusiastic, and would use words sharp and witty to cheer up and stimulate the good and faithful scholar, and make those that were indolent feel the desirableness of having a well-prepared lesson.

In addition to his labors as teacher, Mr. Greenleaf did a great and valuable service to the cause of education, in the preparation of a *Mathematical Series*, which has few equals in excellence and popularity, and on which he expended much thought and toil through more than *twenty-five years* of his life. *His works are a legacy to the present and the future generations, which will keep his name in distinct remembrance.*

But it was not in the school-room, nor by his books alone that Mr. Greenleaf created an influence on his generation. He was an estimable and useful citizen, and a consistent member of the Christian church. He was generous in his gifts for the support of public enterprises and for charitable objects, in full proportion to his means. For three successive years, 1837, 1838, 1839, he was a member of the Massachusetts Legislature. In the course of his connection with that body, he introduced an order for a new Geological Survey of the State, and also one for a Natural History Survey, both of which were adopted, and have produced important results.

He was active and influential in the formation of the "American Institute of Instruction," and for many years was one of its officers. He also did important service on the School Committee of the town, on which he remained to his death. His last days, it is pleasant to say, were peaceful and happy. — *Boston Recorder.*

# Greenleaf's Mathematical Series.

New Primary Arithmetic, Retail Price, .25	New Elementary Algebra, Price, \$1.38
New Elementary Arithmetic, .45	New Higher Algebra, 1.87
New Intellectual Arithmetic, .42	Elements of Geometry, 1.38
New Practical Arithmetic, .94	Elements of Trigonometry, .94

Geometry and Trigonometry, price \$1.87.

[The Common School Arithmetic, price 94 c., and National Arithmetic, \$1.38, containing the Metric System of Weights and Measures, continue to be published.]

## Reasons,

In brief, for giving the books of Greenleaf's New Series the preference to all others:

1. *They are common sense text-books—clear and practical.*
2. *They are modern, and adapted to the best methods of teaching.*
3. *They form a complete graded series for all classes of learners, and for schools of all grades.*
4. *Each book is complete in itself, and the series such that any degree of Mathematical knowledge may be obtained in the least possible time.*
5. *The books are all handsomely and durably made, and in regard to economy, the cheapest of the kind extant.*
6. *They are the only books of the kind which, by force of intrinsic merit, have been sufficiently introduced in all parts of the country, to render practicable, in every town and district,*

AN ENTIRE UNIFORMITY.

## School Boards and Teachers

Are invited to correspond freely with us, and to send for our full

## DESCRIPTIVE CATALOGUE.

The books supplied for *First Introduction, only*, at half of the above named retail prices.

SINGLE COPIES forwarded to teachers, *postage prepaid*, for examination with a view to introduction, on receipt of 15, 30, 30, 60, 80, 120, 100, 60, and 120 cents, respectively. Address,

**ROBERT S. DAVIS & CO., PUBLISHERS, BOSTON.**

**J. A. Bancroft & Co., Philadelphia; Oakley, Mason & Co., New York.**

Sold by all the principal Booksellers in the United States, and in the Dominion of Canada.





# Approved School Books

PUBLISHED BY

E. H. BUTLER & CO.,

611 MARKET STREET, - - - PHILADELPHIA.

## HALDEMAN'S AFFIXES—NEW EDITION.

AFFIXES IN THEIR ORIGIN AND APPLICATION, exhibiting the etymologic Structure of (100,000) English Words. By S. S. HALDEMAN, Professor of Comparative Philology in the University of Pennsylvania. Revised Edition, 1871. Price, by Mail, \$2 00.

The structure of words is so important that books devoted strictly to etymology have been entitled analyses, although they go no farther than the ordinary etymologies. The AFFIXES might, however, have been truly entitled either an ETYMOLOGY or an ANALYSIS, because in no other work is the structure of English words given with such minute attention to the many points left unexplained, even in the examples cited in preceding treatises. Twelve pages have been added to the revised edition, including an index to about seven hundred illustrative words, and an example illustrative of each affix given in the list of (500) Prefixes and (1,500) Suffixes.

"We are strongly disposed to regard the publication of such a book as a striking instance of what we have premised as to the labor and self-denial of its followers."—*Contemporary Review*, London, 1867.

"Analysis so searching and so accurate as that found in this work, presents a study of inestimable value to the student of language. \* \* \* \* \* It is a Book which should be in the hands of every one desirous of obtaining a thorough knowledge of the English tongue."—*Southern Review*, Baltimore, 1868.

## II.

### THE SCHOLAR'S COMPANION—NEW EDITION.

THE SCHOLARS' COMPANION: containing exercises in the Orthography, Derivation, and Classification of English words, with an introduction and a copious index. By RUFUS W. BAILEY. A new edition thoroughly revised. Price, by mail, \$1.00.

This edition contains all the features which have made the book one of the most acceptable to the public during a period of thirty years. Although it is not exclusively devoted to etymology, the greater part is taken up with this subject, the principal derivatives of 604 Latin, and 224 Greek primitives being defined; and in the review edition an index of these is given with an English example added to each, and the new matter extends to fifteen pages.

## III.

### MARTINDALE'S SPELLERS.

COMPRISING

*The Primary Speller*, 96 pages, retail price 20 cts.

*The Complete Speller*, 158 pages, retail price 30 cts.

TESTED IN THE SCHOOL ROOM AND APPROVED.

The prominent features of these spellers are:

1. They are eminently practical
2. They are graded to suit the wants of the learner.
3. In them the Orthography of our language is reduced to a system.
4. They contain a list of contrasted words.
5. The words are presented in the same form as they occur in ordinary printing.

Correspondence of Teachers and other friends of Education is respectfully invited by the Publishers.



# EATON'S MATHEMATICS.

EATON'S PRIMARY ARITHMETIC. Beautifully illustrated and made attractive for beginners.

EATON'S INTELLECTUAL ARITHMETIC. On a progressive plan, with numerous drill exercises for review.

EATON'S COMMON SCHOOL ARITHMETIC. A complete practical Arithmetic, full enough for all ordinary purposes.

EATON'S HIGH SCHOOL ARITHMETIC. A thorough and exhaustive treatise for High Schools and Academies.

EATON'S ELEMENTARY ALGEBRA. Designed for beginners, and yet sufficiently full for the preparation of students for college.

EATON'S ELEMENTS OF ARITHMETIC. A short course of written Arithmetic for graded schools, and classes that have not time to complete a larger work.

EATON'S GRAMMAR SCHOOL ARITHMETIC. Unites the Common School and High School Arithmetics, and is sometimes preferred where only one written Arithmetic is used.

EATON'S MATHEMATICAL SERIES presents the latest and most improved methods of mathematical instruction, including a full and practical exposition of the METRIC SYSTEM OF WEIGHTS AND MEASURES, BY H. A. NEWTON, Professor of Mathematics, Yale College.

From hundreds of testimonials in regard to the high character and successful working of Eaton's series, the following are presented:

From PROF. I. N. CARLTON, A. M., Principal of State Normal School, New Britain, Conn.  
"I believe most fully in Eaton's Arithmetics. The whole MAKE-UP of the books is exact and scholarly, and the more thoroughly one becomes acquainted with them, the better he will like them."

From HON. JOHN D. PHILBRICK, Supt. of the Public Schools of Boston.  
"The use of Eaton's Arithmetics in all the grades of our public schools, during the past four years, has only added new proofs of their excellence. The protracted and severe test to which they have been subjected in the school room has fully confirmed the opinion of their merits given by me previously."

From H. E. SAWYER, Esq., Principal of High School, and Supt. of Schools, Middletown, Conn.  
"Eaton's Arithmetics have been used in the public schools in this city for nearly four years, and have given satisfaction generally to the teachers."

From F. A. BRACKETT, Principal of Barnum School, Bridgeport, Conn.  
"I have used Eaton's Series of Arithmetics in school the past year, and consider them superior, in many respects, to any others published."

From A. P. MARBLE, Esq., Supt. of Schools, Worcester, Mass.  
"Eaton's Common School Arithmetic has been used in the schools of this city with good success for several years. \* \* \* I do not know that it has a superior in the field which it covers."

From Rev. JOSEPH ANDERSON, Acting School Visitor, Waterbury, Conn.  
"Eaton's Arithmetics have been in use in the city and town of Waterbury for more than two years. So far as I know the several volumes have given entire satisfaction, wherever they have been faithfully used."

From WM. HOBSON, Esq., Supt. of Schools, Saco, Me.  
"Eaton's whole series has been adopted for use throughout the city. Our most experienced teachers speak of it in the highest terms."

From HON. T. W. BICKNELL, Superintendent of Schools, Barrington, and Commissioner of Public Schools, State of Rhode Island.

"We have used Eaton's Series of Arithmetics for three years in our public schools, and are prepared to speak of their merits in the highest terms. They are clear in the statement of rules, and in the explanation of principles. The examples are new, modern and practical."

EATON'S MATHEMATICAL SERIES is used wholly or in part, in the public schools of Boston, Worcester, Lynn, Cambridge, Lowell, New Bedford, Pittsfield, Bridgeport, Middletown, Meriden, New Haven, Norwich, New Britain, Stamford, Stonington, Waterbury, North Providence, Pawtucket, Newport, Dover, Biddeford, Saco, Rutland, Windsor, Burlington, Des Moines, Dubuque, and hundreds of other cities and towns in the country.

Descriptive Catalogue of above and other Educational Works sent, postage paid, on application. **LIBERAL TERMS FOR FIRST INTRODUCTION.**

Correspondence solicited. Address the publishers,

**THOMPSON, BIGELOW & BROWN,**

(Successors to Taggard & Thompson,) 25 & 29 Cornhill, Boston.



